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ON THE COVER Red barns (one near Weston, Vermont) are a familiar sight on Route 100.
PHOTOGRAPH BY JESSICA SCRANTON

THIS PAGE Wildebeests take the rain in stride at Kenya's Masai Mara reserve.
PHOTOGRAPH BY SUZI ESZTERHAS

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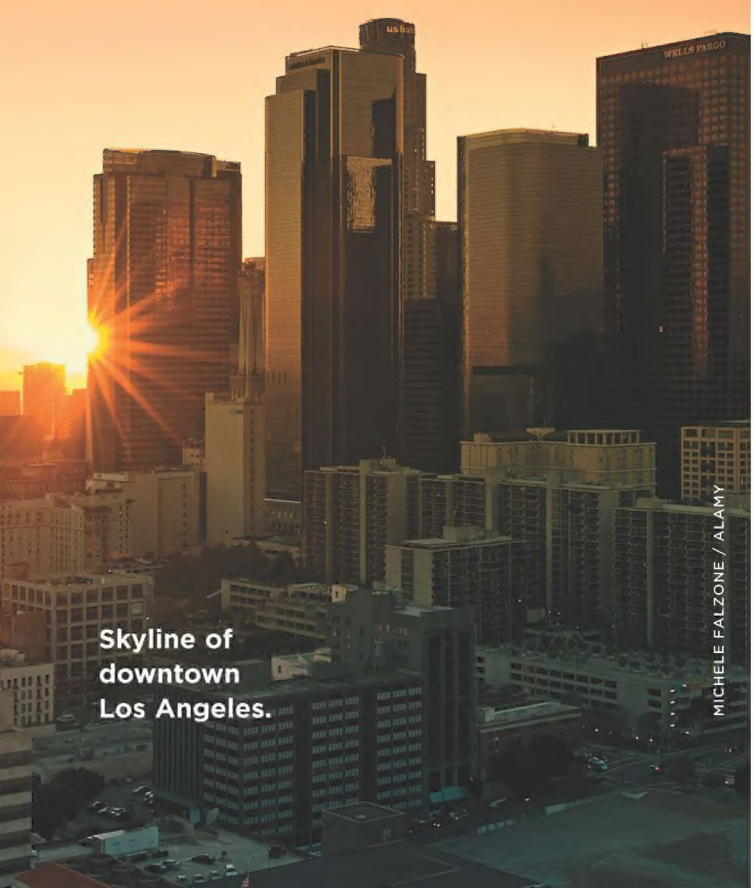

Skyline of downtown Los Angeles.

MICHELE FALZONE / ALAMY

FROM THE EDITOR

Model Moralist

Wayne Wheeler had a mission

BY CAREY WINFREY

SINCE HANDING IN HIS pencil five years ago as the *New York Times*' first public editor, Daniel Okrent has turned to the past. His 2003 book on Rockefeller Center was a Pulitzer Prize finalist in history; his latest effort, *Last Call: The Rise and Fall of Prohibition*, excerpted in this issue, will be published this month. His wife calls him "a serial obsessive," says Okrent. "I find a subject that interests me and I say, 'Gee, do you think I can get somebody to pay me to spend the next three to five years learning more about it?'"

Daniel Okrent: "Gee, do you think I can get somebody to pay me?"

The chapters Okrent adapted for SMITHSONIAN ("The Man Who Turned Off the Taps," p. 30) take up the question of how something as unpopular as a prohibition against alcohol could become law—and via a constitutional amendment no less. The answer, he says, can be expressed in two words: Wayne Wheeler.

Wayne *who*? "Today nobody has ever heard of Wayne Wheeler," Okrent admits, "but in the 1920s he was hugely influential—on the front page of more newspapers, probably, than any other non-officeholder in the country." After Prohibition's repeal, Wheeler was forgotten. But not his influence.

"I think without Wayne Wheeler, there's no Karl Rove, there's no James Carville," says Okrent. "I think he really was the model of the political tactician who knew how to get what he wanted through the entirely legal, if not always seemly, use of minorities to create majorities."

Is there a moral to this story? "I think it's that the political passions of the American people run in cycles. At any given time, whether you're on the left or the right, you may say that this country is in terrible shape because the other guys have taken over and they're destroying everything. Then, it passes. Prohibition is a classic example of that. As late as two years before repeal, there were many smart people saying Prohibition is here to stay. It's permanent. And it was not *remotely* permanent. These things change."

THIS MONTH we are proud to launch a new magazine, *Smithsonian Presents Travels With Rick Steves*, a collaboration with the popular travel expert who shares our interest in the history and culture of notable destinations. In the première issue, Steves reveals his 20 top favorite places in Europe. As he says: become a traveler rather than a tourist.

Travels is available May 4 at selected newsstands and bookstores, or through Smithsonian.com/rick or at (212) 916-1300.

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LETTERS READERS RESPOND TO THE **MARCH** ISSUE

If today's wild horse population of 37,000 is an environmental threat ["The Mustang Mystique"], why wasn't the population of two million-plus in the 1800s a threat? The real issue seems to be that the land is being zealously seized for cattle and sheep ranching.

JEFF MATTHEWS, BENICIA, CALIFORNIA

HORSE SENSE

THE STATEMENT by the photographer that the helicopters, which chase the horses, are no more bothersome than mosquitoes is asinine. The horses are chased for miles. Some die due to age and injuries. One foal that reached its holding pen after a corralling event reportedly had run so hard it developed abscesses that caused his hind hooves to come off; the Bureau of Land Management euthanized him after two painful weeks. The BLM appears to be pursuing an agenda that appeases the cattle industry and politicians. These horses could continue to survive on their own were it not for greed and the inhumanity of man.

RUTH OST
LOUISVILLE, OHIO

WHILE NOT all feral mustangs are direct descendants of the horses the Spanish brought to the New World (over the centuries there has been a lot of crossbreeding), they are an American treasure and deserve better than they are getting from the government. They should be treated as wildlife, not livestock, and should be allowed to remain on public lands. It seems they are being persecuted for not being cattle. They have earned a place in our nation's history through their sweat and blood, as they carried both Native Americans and Europeans over this country. The more readers know about these horses, the better. What we do not know we tend to destroy.

NANCY FALLEY
LOCKHART, TEXAS

DOLLEY'S HELPERS

THE WAR of 1812 often gets overlooked because of the attention given the Revolution and the Civil War. "Dolley Madison Saves the Day" brings to life details about the conflict, as well as the efforts of Maj. Charles Carroll, who persuaded Dolley to flee the White House and took her to the safety of Belle Vue, his mansion in nearby Georgetown. Belle Vue, today named Dumbarton House, still stands. It is now a museum where Dolley and the War of 1812 are commemorated each August.

KAREN DALY
WASHINGTON, D.C.

THOMAS FLEMING'S excellent article on Dolley Madison overlooks an important historical fact. During its advance on Washington, the British fleet met persistent resistance by a flotilla of shallow-draft gunboats commanded by Commodore Joshua Barney. When Barney was outgunned, seven to one, he scuttled his small fleet, took his flotilla men ashore and used them during the Battle of Bladensburg. Some believe the majority of the casualties inflicted on advancing troops came from the naval men. Barney was wounded in the battle, left behind at his own request and captured by the British, who treated and released him. (He died in 1818, possibly of complications from the war wound.) Although the battle was an American defeat, the American Navy did offer stiff resistance to the British invasion.

TERRENCE BRONSON
MONROE, MICHIGAN

PICTURE OF SUPPORT

SOME MAY describe Shelby Lee Adams' photograph of a home wake in Leatherwood, Kentucky ["The Vigil"], as bleak. Born and raised in the coal country of southern West Virginia, I see more—a family supported by relatives and friends at a time of deep grief. After the death of my own father in 2004, our family received an outpouring of love from hundreds of Appalachian people who visited from morning until night, bringing gentle stories, food, paper goods, even postage stamps, in an effort to show how much they cared. After my dad's wake, in the parish church where he was baptized and married, my 12 siblings and our families took turns staying with him through the night. Our friends braved icy roads to make sure we were never alone. The care we received from our neighbors of modest means was in stark contrast to what awaited us when we returned home to our upscale Washington, D.C. suburb, where people at work expressed their condolences in cards and neither neighbors nor church acquaintances mentioned anything more about our loss. It's our impersonal lives here that are truly bleak!

VICKI RANSOM
COLUMBIA, MARYLAND

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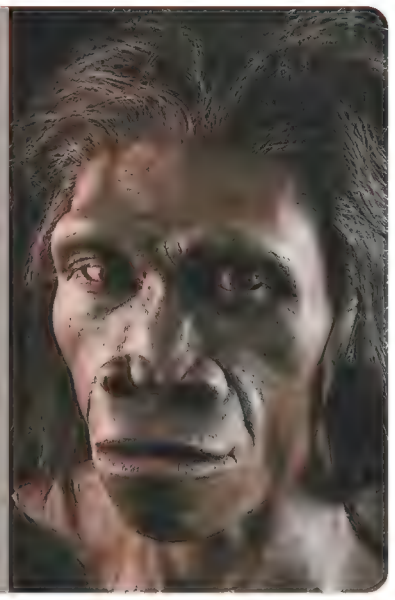
EARLY HUMANITY

"These faces say to me—we are ancient, with our own animal nobility and our own primal intelligence."

—Ann Stanton of Maclean, Australia, on "A Closer Look at Evolutionary Faces," about busts (right: *Homo erectus)* created for the Museum of Natural History's Hall of Human Origins



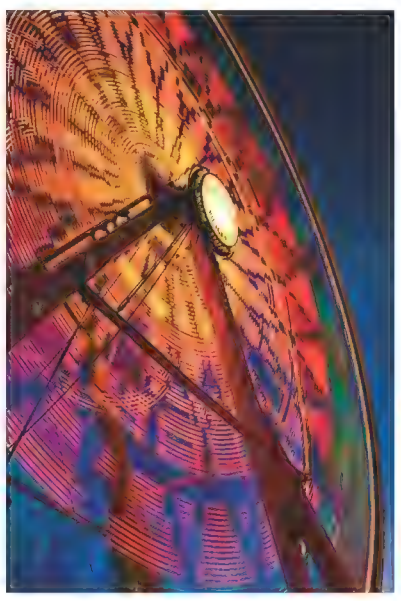


PHOTO CONTEST

EDITORS' PICK

"I wanted to capture the feeling of motion and sense of scale of being atop the ride. This image stood out because of the vibrant colors with the blue sky and clouds."

—Alan Penner, of Goleta, California, on his 2008 photograph taken at the Santa Barbara Fair & Expo

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CHANGE AGENTS

Whatever your political views on global warming may be, it is hard to ignore the accounts of those who are experiencing climate change firsthand.

—Cleve Gray, of Bethesda, Maryland, on "Barrow, Alaska: Ground Zero for Climate Change"

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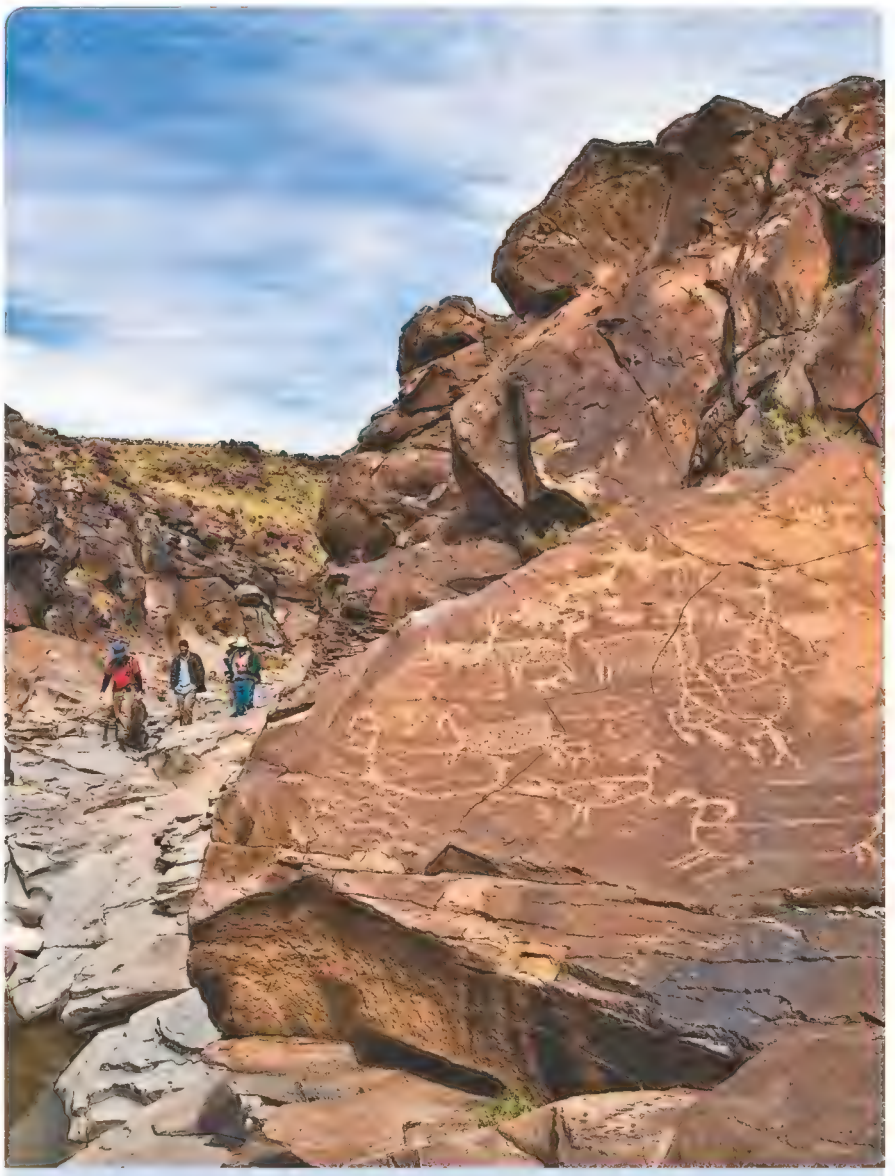

RIDGECREST is a gem tucked away at the base of the Sierra Nevada in the high desert (above: Little Petroglyph Canyon, on the nearby China Lake Naval Air Weapons Station). A fairly young community (c. 1940), it is just now seeing its growth spurt. Within an hour and a half is some of the greatest fun California has to offer: Death Valley; Tehachapi and Laws (trains); Mammoth Mountain (skiing); Lone Pine (fishing, and backpacking at Mount Whitney); and Boron (the Twenty Mule Team Museum). All around are signs of the gold rush including the ghost towns Randsburg and Bodie. Ridgecrest is one of the only towns in the United States where you will see temperatures near 120 degrees Fahrenheit in the summer, being so close to Death Valley, and snow in the winter, being close to the Sierras.

YOUR KIND OF TOWN

RIDGECREST, CALIFORNIA

BY R. BRIAN VOIGT

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MEXICO

AUTHENTIC FLAVORS WITH A NEW TWIST

Mexico is experiencing a gastronomic awakening. In recent years, Mexican chefs have shown that the unique flavors of traditional ingredients and those from other countries, together with creative use of colors and designs, can be combined to create wondrous works of art.

Traditional Ingredients Reinterpreted

From the fresh, traditional dishes at Ricardo Muñoz Zurita's Café Azul y Oro in Mexico City; to the blend of old world flavors with contemporary flair at Chef Guillermo Gonzalez Beristain's Grupo Pangea Restaurants in Monterrey; Mexico's new chefs are committed to refreshing the Mexican palate. These culinary masters begin with a traditional Mexican recipe and re-work it using new ingredients and techniques, so that the final product is a forward-looking homage to Mexico's gastronomic past.

100% Local, 100% Delicious

Locally sourced ingredients are an important part of this new cuisine, and many of Mexico's famous chefs are committed to the local food movement. In each region of Mexico, different flavors can be found, and dishes are enriched by the contributions of spices and ingredients native to specific areas. Local seafood, chicken, duck, and pork combined with vegetable dishes based on beans, tomatoes, avocadoes, corn, pumpkin seeds, mole sauces and corn tortillas contribute to menus that are delicious and diverse.

A Culinary Adventure

The culinary arts in Mexico are continuously growing and evolving. The development and experimentation of regional cuisines with new techniques and ingredients from all over the world are being fused together in ways never before imagined. Wherever the gastronomic journey through Mexico may lead visitors, it is certainly one of the most delicious ways to experience Mexican culture.

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Sum of Her Parts

Frances Benjamin Johnston's self-portraits show a woman who could play contrasting roles **BY VICTORIA OLSEN**

FRANCES BENJAMIN JOHNSTON made her name as a photographer in the 1890s, taking portraits of the political elite in Washington, D.C.—society hostesses such as Phoebe Hearst, and the wives of President Grover Cleveland's cabinet members. At the same time, she befriended artists and other outsiders, hosted costume balls in her studio and traveled the country unescorted. Among the 20,000-odd prints she donated to the Library of Congress in 1947—including not only her portraiture, but also a substantial body of photojournalism—are the two self-portraits on these pages.

One shows her as a bohemian: holding a cigarette and a beer stein, crossing her legs like a man and revealing her petticoats, leaning aggressively forward, as if in mid-conversation (or confrontation). The photograph, taken around 1896, is self-consciously assertive—"She would not have actually sat that way and done all of those things at one time," writes Laura Wexler, a professor of American studies at Yale University. The portrait seems to play with the Victorian assumption that unconventional women were somehow "masculine." By ironic contrast, there's the undated self-portrait showing her full face, in fur and beribboned hat, her gloved hand occupied in the delicate support of her chin. This lady is proper—and yet she, too, seems to toy with the conventions on display. As Johnston's biographer Bettina Berch points out, these self-portraits "show viewers there was more than one woman, more than one consciousness, behind the surface they saw."

Johnston herself could be both ladylike (above) and bohemian (opposite), which abetted her career as a photographer.

These two self-portraits, along with several others, including some in which she wears men's clothes, were not widely circulated in Johnston's lifetime. Yet they define two poles of Victorian womanhood. While we might assume that women of Johnston's time were forced to choose one role or the other, she made a career out of playing many (much as contemporary, role-playing photographer Cindy Sherman would do a century later).

Johnston was born, in 1864, without wealth but with good connections: her father, Anderson Johnston, was head bookkeeper in the Treasury Department, and her mother, Frances Antoinette Johnston, was a Washington correspondent for the *Baltimore Sun*. They supported their only child's interest in art, sending her to Paris to study painting. Returning to Washington in 1885, Johnston, then 21, set out to support herself, first as a magazine illustrator and later as a freelance photographer. Her commissions ranged from taking pictures of coal miners underground to documenting educational institutions, such as the Hampton Normal and Agricultural Institute (now Hampton University), founded to educate former slaves. Her photographs of schools were displayed at the Universal Exposition in Paris in 1900 as evidence of America's

With a word from her acquaintance Theodore Roosevelt, then assistant secretary of the Navy, Johnston was allowed to photograph sailors aboard the USS *Olympia* (top) after they helped win the Battle of Manila Bay in 1898. A Long Island estate was the setting for her portrait of Isadora Duncan's dance troupe (above) in 1914.

progress in education. Toward the end of her career she turned to photographing gardens and Southern architecture, preserving views of many antebellum buildings that have since been razed.

While Johnston was running her studio in Washington, feminist campaigns to secure the vote and other rights were encouraging women to break out of their domestic roles. In 1897, she published an article in the *Ladies' Home Journal* urging women to consider photography as a means of supporting themselves. "To an energetic, ambitious woman with even ordinary opportunities, success is always possible," she wrote, adding that "hard, intelligent and conscientious work seldom fails to develop

Johnston was not a suffragist, but she photographed Susan B. Anthony c. 1900.

small beginnings into large results." Johnston also used her influence to help other American female artists—for example, arranging exhibits of their work for the 1900 Paris Exposition. Her portraits of Susan B. Anthony, taken that same year, capture the stoic determination that the feminist leader needed—for half a century—to hold together the competing groups working toward women's suffrage. And yet there is no evidence that Johnston ever participated in a feminist campaign.

She maintained her independence, financially and artistically, till she died, in 1952, at age 88. Wexler writes that Johnston was one of several women who "held a very significant place in American photography at the turn of the century and then were 'lost' to history." Now, 90 years after the 19th Amendment gave women the right to vote, Johnston's bohemian artist still urges women forward at the same time her proper Victorian lady reminds us all to look back at what we have achieved. In both cases, the images show a woman using every angle to forge a new identity for herself and for the legions of women who would follow her.

VICTORIA OLSEN *last wrote for the magazine on Cindy Sherman's self-portraits.*

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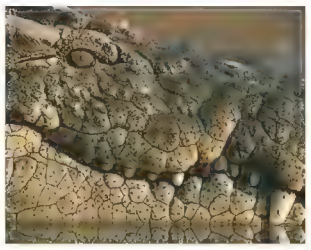
WILD THINGS

LIFE AS WE KNOW IT

BY T.A. FRAIL, MEGAN GAMBINO, ERICA R. HENDRY, JESSE RHODES AND SARAH ZIELINSKI



PRIMORDIAL FEAR

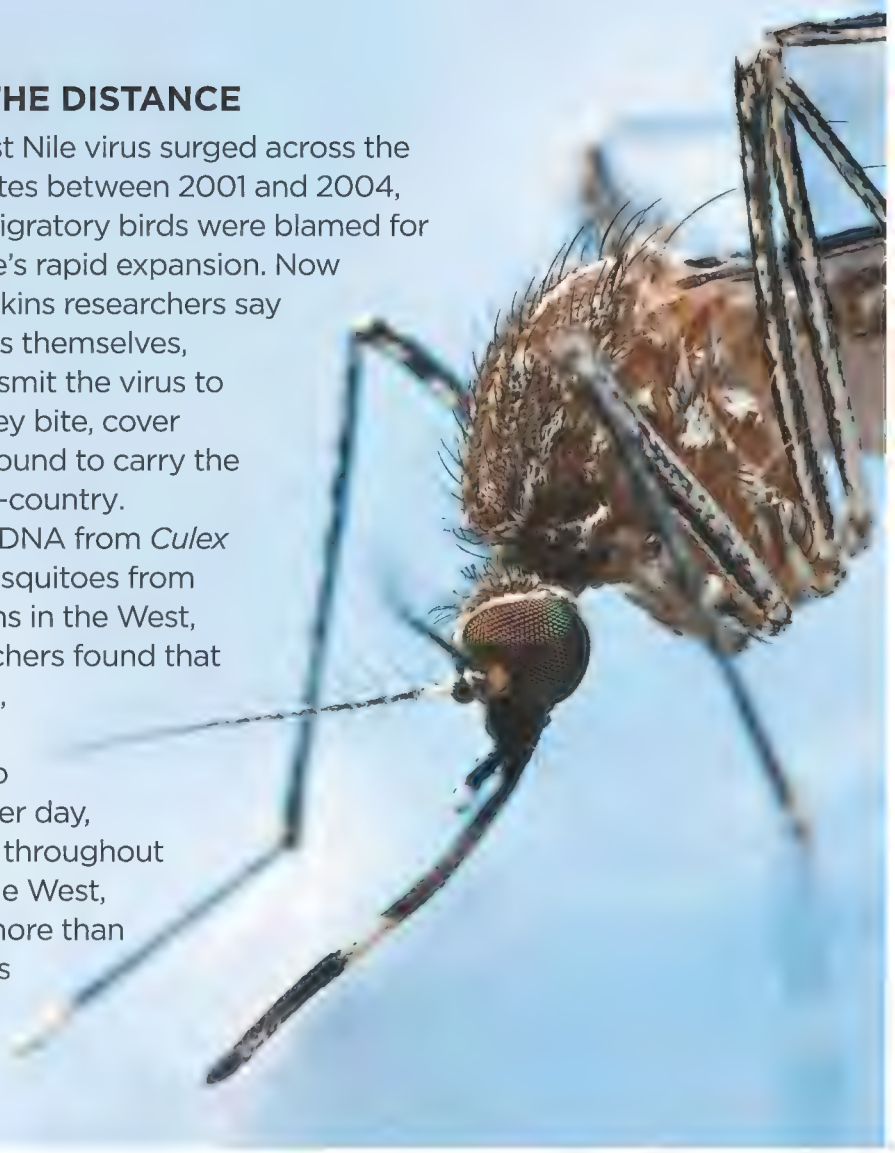
Paleontologists working in Tanzania discovered fossilized bones of a two-million-year-old horned crocodile. Early humans such as *Homo habilis* lived in the area then, and the 16-foot croc—related to modern Nile crocodiles (above)—would have been the largest predator our ancestors encountered. In fact, the researchers also found fossilized hominid bones from the same site and era. The bones had crocodile bite marks in them. The University of Iowa-led team named the new species *Crocodylus anthropophagus*. Translation: man-eating crocodile.

NIGHT OR DAY?

Many animals, plants and even bacteria have internal, sunlight-sensitive biological clocks that help them know when to eat and sleep. But now scientists working in Norway say reindeer lack such a clock, a first for mammals: they have no daily fluctuation in melatonin, a hormone crucial for sleep-wake cycles. Reindeer live high in the Arctic, where they experience months of winter darkness and summer light. During these seasons, previous research showed, the animals' activity is independent of the time of day.

GOING THE DISTANCE

When West Nile virus surged across the United States between 2001 and 2004, infected migratory birds were blamed for the disease's rapid expansion. Now Johns Hopkins researchers say mosquitoes themselves, which transmit the virus to animals they bite, cover enough ground to carry the virus cross-country. Analyzing DNA from *Culex tarsalis* mosquitoes from 20 locations in the West, the researchers found that the insects, known to travel up to 2.5 miles per day, interbreed throughout much of the West, mingling more than researchers expected.



BLOOM OF WARMTH

In winter, when most vegetation has recoiled into the earth, the plant *Helleborus foetidus* begins to bloom. How does it stand the cold? Scientists with the Spanish National Research Council found that strains of yeast living in the flowers' nectar warm the flowers up to 13 degrees Fahrenheit by metabolizing sugars. The yeast allows the plant to flourish even with low temperatures and little sun. The researchers call it a "novel mechanism whereby flowers can raise their temperatures."

Observed

NAME: The Asian elephant (*Elephas maximus*).
WALKS: With at least two, and sometimes three, feet on the ground at the same time, according to a new study of the animal's gait at different speeds.
RUNS: Not really, say the researchers, who tested elephants at a conservation center in Thailand by having the animals move at different speeds across a giant platform that measured forces. According to some definitions, a run requires having all feet off the ground at once.
BOUNCES: Much less than you'd think. Elephants accelerate by taking quicker and longer steps. Since they are always well grounded, they have a smoother stride.

JOSEPH BERGER / BUGWOOD.ORG; ANUP SHAH / NPL / MINDEN PICTURES; SIMON BOOTH / NHPA / PHOTOSHOT; RALPH LEE HOPKINS / NATIONAL GEOGRAPHIC STOCK; NICK GARBUTT / NATUREPL.COM

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Unless they are rescued, says naturalist Dennis Murley (with turtles), Kemp's ridleys stranded on Cape Cod beaches will die.

Coldblooded Rescue

Researchers are saving the world's most endangered sea turtles by degrees

BY AMY SUTHERLAND PHOTOGRAPHS BY HERB SWANSON

CAPE COD BAY churns as a frigid gust flicks froth into the air and the surf claws at the beach. I find a tangle of black seaweed on the sand, lift a handful of the wet mess and glimpse the lines of a shell. I grab more seaweed and uncover what I've been searching for: a Kemp's ridley turtle, a member of the world's most endangered species of sea turtle.

It's a long way from the beach in Mexico where the turtles almost certainly hatched. It's so still I doubt it's alive. I pull off my gloves, lift the animal by its foot-wide shell and trot down the beach, holding it in front of me like a priceless porcelain vase. The turtle slowly raises its plum-size head and pops open its small eyes. One flipper flutters, then another. The turtle begins to paddle in the air, as if swimming. I sprint to my car.

Sea turtles already crowd the foyer when I arrive at the Massachusetts Audubon Society's nature center in Wellfleet. People hustle to put each animal on a clean towel in a cardboard box that once held bananas. Here and there a flipper waves, but most of the turtles are motionless. One exhales raspily. Volunteers plucked six turtles off beaches this morning and seven last night. Two are green turtles and the rest are Kemp's ridleys. "I doubt there is a room in the world right now that has this," says Dennis Murley, a naturalist at the center.

Each fall, typically by late October, Kemp's ridleys and other sea turtles start washing up on the 50-mile-long shoreline along Cape Cod Bay between Sandy Neck and Provincetown. The turtles, almost all juveniles, are thought to follow warm summer currents north to Maine or beyond; then, as fall approaches, they head south before inadvertently swimming into the bay formed by the great crooked cape.

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As the water temperature drops, so does the coldblooded animal's body temperature, until the turtle sinks into a deep torpor, too weak to find its way out of the bay. Turtles do occasionally wash up on other beaches along the East Coast, but only on Cape Cod are substantial numbers found every year.

About half of the turtles on the beach are already dead. The others, called cold-stunned turtles, will die of hypothermia if left on the sand, says Murley, because the air is even colder than the water.

He and Bob Prescott, the Audubon center's director, weigh and measure the turtles. Some move frantically; the one I found, whose shell is coated with algae and has been given the number 93, starts doing the crawl stroke again. Prescott touches the motionless ones on the back of their heads or at the corner of their eyes, looking for a reaction that will tell him they're alive. "Sometimes you can't even tell from that," Prescott says. The center keeps any turtle presumed dead for at least 24 hours. Over the years, Murley says, a few of these have revived. "Lazarus turtles," he calls them.

I lift the animal by its shell and trot down the beach, holding it in front of me like a priceless porcelain vase.

Kemp's ridleys hatch on a few beaches in Mexico and Texas, and some range all the way to Canada (above left). When some turtles swim south in the fall, scores of them get trapped by Cape Cod (above right), where many die of hypothermia.

MOST KEMP'S RIDLEY TURTLES NEST along Mexico's Gulf coast, but some nest in Texas. This is one of only two sea turtle species that lay eggs in mass nesting groups called *arribadas*. (The other species, the olive ridley, lives in the Atlantic and Pacific oceans.) Some young Kemp's ridleys are thought to swim from the Gulf of Mexico to the Sargasso Sea, in the middle of the Atlantic. As they mature, they paddle west toward shallower water along the coast of North America, where they can live for decades. The world's smallest sea turtles, they grow about two feet long.

Vast numbers of Kemp's ridleys once nested simultaneously; in 1947, a beachgoer filmed some 42,000 turtles on a beach in Mexico. Unfortunately for the species, people liked to eat the eggs, which were easy to harvest, and thought they acted as aphrodisiacs. By the 1960s, the turtle population had plummeted. Mexico outlawed the harvest in 1966, but poaching continued to take a toll. Meanwhile, increasingly scarce adults were often caught in fishing gear. In 1985, only 702 turtle nests were found, the lowest number on record. With new, turtle-excluding fishing nets and better protection of their nesting beaches, the species has begun to recover. An estimated 8,000 females nested last year.

Prescott says the population increase may explain why more Kemp's ridley turtles have recently been found along Cape Cod. When he came across his first one, in 1974, he didn't know what it was doing there. By the 1980s, maybe ten a year washed in, some of them still alive. Prescott and Murley organized a few people to comb the beaches in autumn and early winter. In 1999, they found a record 278, of which 219 were Kemp's ridleys. Since then, the center has maintained a corps of about 100 volunteers, nearly all retirees.

"The easy part is finding them on the beach," Prescott says. "The hard part is the medical treatment."

After the turtles are bundled up at Wellfleet, volunteers and staffers transport them to a clinic at the New England Aquarium in Boston. The clinic is crammed with microscopes, computers and medical equipment as well as tanks of blue water that gurgle and hum.

"Welcome to the real world, Bud," a volunteer in surgical scrubs says to a turtle that she plucks out of a box. She lays the seemingly lifeless animal on an examining table. Jill Gary, a biologist with the aquarium, sinks a needle into the back of its neck and draws out thick, maroon-colored blood. Gary squirts yellow antiseptic into the animal's eyes and checks the cornea

Watch the release of the Kemp's ridleys at Smithsonian.com/turtles

MAP: GUILBERT GATES

for scratches. The volunteer has been holding a monitor to the turtle's heart. "I've had only one heartbeat so far," she says.

Gary inserts a rectal thermometer into the turtle and the animal springs to life. Its temperature is 53.8 degrees Fahrenheit, about 20 degrees below normal. Gary, however, is in no rush to change that.

When people at the aquarium began treating cold-stunned sea turtles extensively, in the mid-1990s, little was known about hypothermia in the animals. Through trial and error and the testing of various medications, they have figured out how to save about 80 percent of the turtles brought into the aquarium.

Charlie Innis, the aquarium's head veterinarian, says the animals die if they warm up too quickly. As the turtle's temperature rises, pathogenic bacteria that have lain dormant in its body also revive. The turtle's immune system, compromised by hypothermia, isn't up to the fight. The turtles are also susceptible to fungal infections. The main danger is pneumonia—about 20 percent of the turtles have it when they arrive, and perhaps 25 percent will contract it here.

The biologists have learned it's best to warm the turtles by about five degrees a day. After each turtle is examined, it is tucked into a square, temperature-controlled contraption that is basically a turtle refrigerator. The temperature is set near the turtle's core body temperature and turned up slightly each day.

At the clinic, a turtle with a body temperature in the 60s is plopped into a waist-high water tank to see how it swims. A volunteer watches to see if it's strong enough to lift its head to breathe. It does, but just barely.

The blood-test results begin to come in from the lab equipment on the other side of the clinic. Most of the turtles are hypoglycemic, a sign that they are starving, and their electrolytes are out of balance, indicating that they are dehydrated. They will be injected with fluids and antibiotics for days, even months in some cases.

THE TURTLE BEACHING SEASON ends in January; after the water temperature drops to about 40 degrees, nearly all the turtles that wash in are dead. This year volunteers found 200 turtles, the third highest catch. Eighty-five were alive and sent to the aquarium. The staff named the turtles after parks in the United States. The one I found got named Voyageurs, after a national park in northern Minnesota.

The aquarium needed to make room for new arrivals, so it shipped out the turtles that were strong enough to travel. Voyageurs and 16 other survivors were sent to the University of New England in Maine. Three went to the National Aquarium in Baltimore, four to the Woods Hole Aquarium in Falmouth, Massachusetts, and three to the Riverhead Foundation on Long Island. The rest, 33 Kemp's ridleys and the three greens, stayed in Boston.

"The easy part is finding them on the beach," Bob Prescott says. "The hard part is the medical treatment."

Turtles rescued from Cape Cod beaches (above: in banana boxes awaiting transport) are revived and cared for at the New England Aquarium (right: biologist Connie Merigo, holding animal in foreground, and co-workers).

Connie Merigo, a biologist who manages the rescue effort, chooses when to release the sea turtles, usually in late summer. She monitors local sea temperatures, waiting for the water to reach about 70 degrees, and keeps track of turtle sightings offshore, a sign that conditions in the water are good. The turtles are released in Nantucket Sound, where they will have fewer obstacles on their route south. Identification tags will be placed on all animals and several will also receive satellite tags that record where they go.

Last summer, for the first time, a turtle rescued from Cape Cod Bay and tagged at the New England Aquarium was spotted nesting on a beach on Padre Island in Texas. Adam Kennedy, an aquarium biologist, says the rescue team got word of the nest at the beginning of this year's stranding season. The news made it easier to gear up for the coming days of pressure-filled work. "It's just really exciting," he said. "That's what we are here for."

AMY SUTHERLAND's *most recent book is* What Shamu Taught Me About Life, Love and Marriage.

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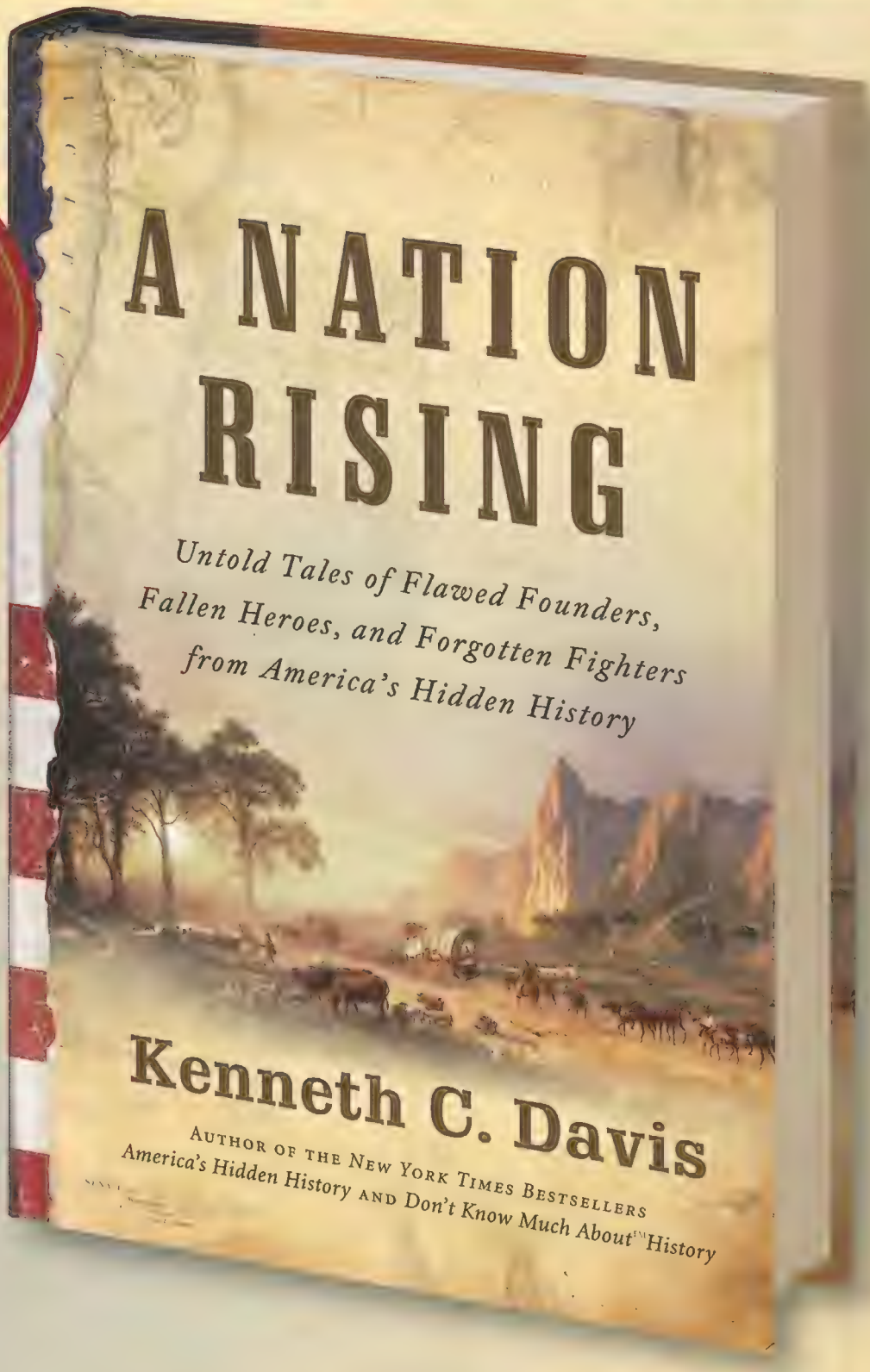
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Around the Mall

SCENES AND SIGHTINGS FROM THE SMITHSONIAN MUSEUMS AND BEYOND

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PROBING A STRADIVARIUS

MEDICAL SCANNERS MAKE IT POSSIBLE TO STUDY THE ANATOMY OF THE WORLD'S GREATEST STRINGED INSTRUMENTS—AND UNCOVER THE TRADE SECRETS OF THE MAN WHO MADE THEM

PAGE 23

Anthropologist Bruno Frohlich with a 1920 Czech viola at the National Museum of Natural History.

SEAN McCORMICK

Antarctica!

BY G. WAYNE CLOUGH

PENGUINS WATCHED US as we waited in our "big reds" (expedition parkas) to board a plane for a three-hour flight from McMurdo Research Station to the South Pole. In 1908-09, explorer Ernest Shackleton needed 73 days to travel from near McMurdo to within 112 miles of the pole, and then weather forced him and his team to turn back. Their return trek was a race against starvation, which they won just barely. Antarctica is the world's coldest, windiest and driest place; in some valleys, there has been no precipitation for two million years. In January, I became the first Smithsonian Secretary to travel—with a group of leaders of other scientific organizations—to this magnificent continent.

The Smithsonian's involvement in Antarctic research has been long and varied. The Wilkes Exploring Expedition (1838-42) proved that Antarctica is a continent; in 1858, the Institution received the expedition's collections. Today our Antarctic collections comprise more than 17,000 meteorites (including some extremely rare ones from the Moon and Mars) and nine million invertebrate specimens. Since 2001, the Institution has managed the National Science Foundation's Antarctic Diving Program, which trains some 35 scientists for under-ice diving each year. From 1995 to 2007, the Smithsonian Astrophysical Observatory operated the Antarctic Submillimeter Telescope and Remote Observatory.

Clough (in Antarctica): Three hours, not 73 days, to reach the South Pole.

December 1, 2009, marked the 50th anniversary of the signing of the Antarctic Treaty, which governs Antarctica in the "interests of science and the progress of all mankind." On the anniversary day, the Smithsonian hosted an Antarctic Treaty Summit to discuss science-policy interactions in the governance of international spaces.

This month I head to Alaska to celebrate a new Smithsonian exhibition at the Anchorage Museum of History and Art. The Arctic has been a focus of Smithsonian anthropological and other scientific studies almost continuously since 1857. The National Museum of Natural History's Arctic Studies Center regional office opened in Anchorage in 1994. I also plan to travel to St. Lawrence Island in the Bering Sea. The Smithsonian has extensive collections from the island, dating back to 1881, and our studies of Arctic cultures and environmental change are ongoing there. My Antarctic and Arctic trips follow our participation in the Fourth International Polar Year 2007-2008 (www.si.edu/ipy), which highlighted our polar research—including studies of astronomy, biological organisms, environmental change, indigenous peoples and their cultures, and marine ecosystems. This research becomes particularly pertinent with the ever-increasing evidence that human activity is accelerating climate change—reflected in Arctic sea ice shrinkage and the shifting of food sources for Antarctic penguins.

G. WAYNE CLOUGH *is Secretary of the Smithsonian Institution.*

Learn more about the Secretary's trip to Antarctica at Smithsonian.com/journals

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TOM PETERSON

The Sight of Music

3-D IMAGING REVEALS HOW INSTRUMENT MAKERS MIGHT RECREATE THE SOUND OF A STRADIVARIUS

AS AN 8-YEAR-OLD BOY in Denmark, Bruno Frohlich wanted to be a musician. He became a church organist's assistant, yearning to create the haunting sound that poured from the instrument's pipes.

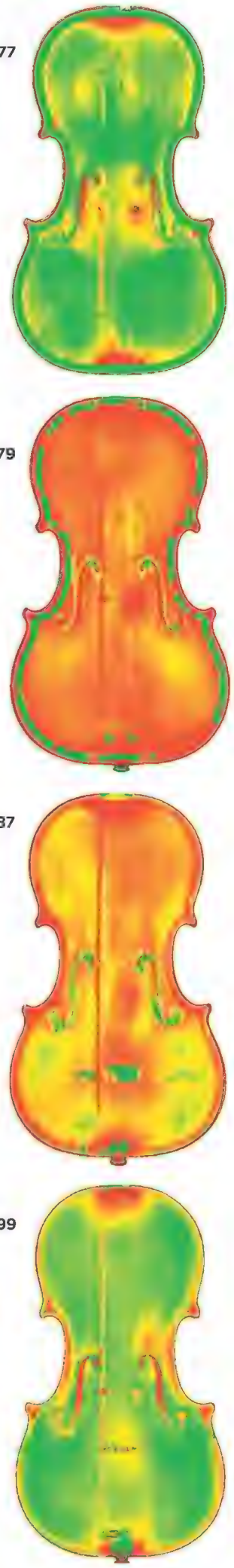
But Frohlich soon became more interested in how the organ worked; the church organist arrived one morning to find his young pupil taking apart the instrument with a screwdriver and a hammer.

Frohlich, 64, and now a research anthropologist at the National Museum of Natural History, is still fascinated with musical instruments—though he has found a less destructive way to study them. In his laboratory sits a massive CT scanner, which is normally used to create three-dimensional images of human tissue. Frohlich uses it to probe the anatomy of the world's greatest violins, including those made by Antonio Stradivari between 1677 and 1727.

Musicians throughout Europe traveled to Italy to purchase Stradivari's violins. His competitors tried to figure out his "secret"—or, failing that, simply put his name on their violins. Today, artisans and scientists are still struggling to recreate the Stradivari sound. Some have chipped varnish off the violins, hoping to discover a special chemical compound. Others have built their own instruments, using artificially aged wood.

But Frohlich puts no stock in secret ingredients. He prefers an investigation into all elements of the violins' design. "There's no way we can do a study focusing on just one small thing," he says.

Nor does he see much value in trying to assess how a violin actually sounds—mainly because there is no objective way to measure euphony, where beauty is in the ear of the beholder. Still, the popularity of Stradivari's instruments attests to their having struck a chord among many musicians.



Research anthropologist Bruno Frohlich uses a CT scanner to study both antique and contemporary violins. In the Stradivariuses at right, which tend to be thinner than most and have a more uniform volume of air, red indicates thicker wood; green, thinner.

BRUNO FROLICH, SI (4)

Over the past ten years, Frohlich has scanned nearly 50 violins and other stringed instruments—by Stradivari, his contemporaries and current artisans. He is still compiling data, but has come to some initial conclusions. One distinguishing characteristic of a Stradivari violin is a consistent volume of air within it, which can affect tone quality. And, while the wood in other violins can be several millimeters thick, many of the Stradivari instruments Frohlich has studied are just one millimeter thick in places of the body. Frohlich is not certain whether the thinner wood contributes to the instrument's unique sound. More likely, he suggests, musicians simply preferred a violin that weighed less—allowing for more comfort with the instrument and better performances.

Until now, there has been no way for instrument makers to quantify such characteristics and correlate them to musicians' preferences for dark, low tones that linger in the air and for richness and depth of sound.

"What we might find from Frohlich's work is that there's a way to describe a perfect air volume before you hear it, before we finish the violin," says John Montgomery, a violin maker who repairs instruments at Smithsonian museums and the Library of Congress. Such knowledge, he adds, "can be repeated from one instrument to the next."

Once Frohlich is done analyzing the data, he says, he'll work with Montgomery to make the results available to instrument makers—something unthinkable in Stradivari's day.

"In the old days you had this very rigid master-apprentice relationship, and it was very secretive," Montgomery says. "You weren't allowed to tell people what you knew, you had to keep it to your trade." But Frohlich's research could transform the crafting of violins from solo performances into symphonies.

ERICA R. HENDRY

Watch Frohlich's research in action at Smithsonian.com/strings

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Snail Mail

A letter that took two years to reach its destination evokes the hazards of the Pony Express

BY OWEN EDWARDS

IN 1860, AN ILL-FATED Pony Express rider, whose name has been lost to history, was crossing the trackless wastes of Nevada when he vanished, likely killed by Indians. Two years later, in May 1862, the mail pouch from that doomed mission, still containing letters bound for the East, was recovered.

Today, only a few remnants from the contents of that saddlebag survive. Among them is an envelope—a rare artifact of the mid-19th-century's legendary Pony Express mail service, founded 150 years ago. (The letter that was inside has long since disappeared.) The philatelic treasure will reside on long-term loan at the Smithsonian's National Postal Museum (NPM). Recently, the envelope's owner, William H. Gross, a passionate stamp collector since childhood, donated funds for a new 12,000-square-foot gallery at the museum, scheduled to open in 2012. The envelope will take pride of place in the new exhibition space. "There are only two pieces of what collectors call 'interrupted mail' from the Pony Express known to exist, and they were in that rider's pouch," says NPM curator Daniel Piazza.

The concept of expedited mail delivery by a relay of single riders on fast horses—a kind of grass-fueled FedEx—echoed the vision that won the West. Established in April 1860, the Pony Express failed to win a major contract from the federal government and was replaced by a stagecoach line after only 18 months. Yet its bravado has colored the mail service ever since.

The transcontinental delivery system was marvelous in its simplicity. Across 1,900 miles, at 186 stations between St. Joseph, Missouri, and Sacramento, California, fresh horses awaited carriers who rode at full gallop in 10- to 12-mile segments (judged to be the maximum distance that a good mount could maintain a speedy clip). At each station, the rider leapt off one horse and onto the next, then sped on. The tough, wiry horsemen covered up to 125 miles at a stretch—a punishing pace that commanded a then-substantial salary of $25 per week. William "Buffalo Bill" Cody and James "Wild Bill" Hickok boasted they had earned their spurs as young Express riders. "Or so they claimed," says Piazza. (There is no evidence that either did so.)

Danger was ever-present (top: a rider, c. 1860, who appears to have encroached on sacred burial grounds, flees Indians). Rare correspondence (above)—carried by a vanished courier—is one of only "two pieces of what collectors call 'interrupted mail' from the Pony Express," says Postal Museum curator Daniel Piazza.

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Go behind the scenes of the National Postal Museum's transportation collection at Smithsonian.com/postal

The rare 1860 envelope attests that hard riding was not the most daunting aspect of the job. Routes passed through deserted, often forbidding, territory. A note scrawled on the front of the artifact alludes to its tragic backstory: "Recovered from a [sic] mail stolen by the Indians in 1860." The nameless victim is thought to have been the only Pony Express rider killed, though a few station agents died when Indians attacked their outposts.

The letter at last reached its destination—a New York City business recorded only as Fred Probst & Co.—in August 1862. Says Piazza: "So much happened between when the letter was sent and when it arrived—Lincoln's election, the secession crisis, the beginning of the Civil War." (In March 1861, the Pony Express set a record for transcontinental delivery—7 days 17 hours—when riders carried Abraham Lincoln's Inaugural Address to the West Coast.) The envelope bears an oval stamp that reads "The Central Overland California & Pikes Peak Express Company," the enterprise that administered the Pony Express. It had disbanded nine months before, on October 26, 1861.

The envelope also bears a basic 10-cent stamp, which normally would have meant a two-month trip, as the letter traveled from San Francisco by ship down the West Coast, across the isthmus of Panama and by sea up the East Coast to New York City. The additional cost for Pony Express service—guaranteed to reach the East Coast in about 12 days—was $5 (roughly $133 in today's currency) per half-ounce.

Ultimately, says Piazza, even the envelope's stamp, with its image of George Washington, offers a history lesson. "Although the letter was delivered," he says, "the 10-cent stamp was no longer valid. At the beginning of the [Civil] War, all existing postal stamps were demonetized so the Confederacy couldn't use them."

OWEN EDWARDS *is a freelance writer and author of the book* Elegant Solutions.

Q&A

When keepers at the National Zoo noticed that Kigali, a 15-year-old female western lowland gorilla, had a fractured tooth, they called in veterinary dentist **BARRON HALL**, of the Animal Dental Clinic in Vienna, Virginia. He spoke with the magazine's Megan Gambino.

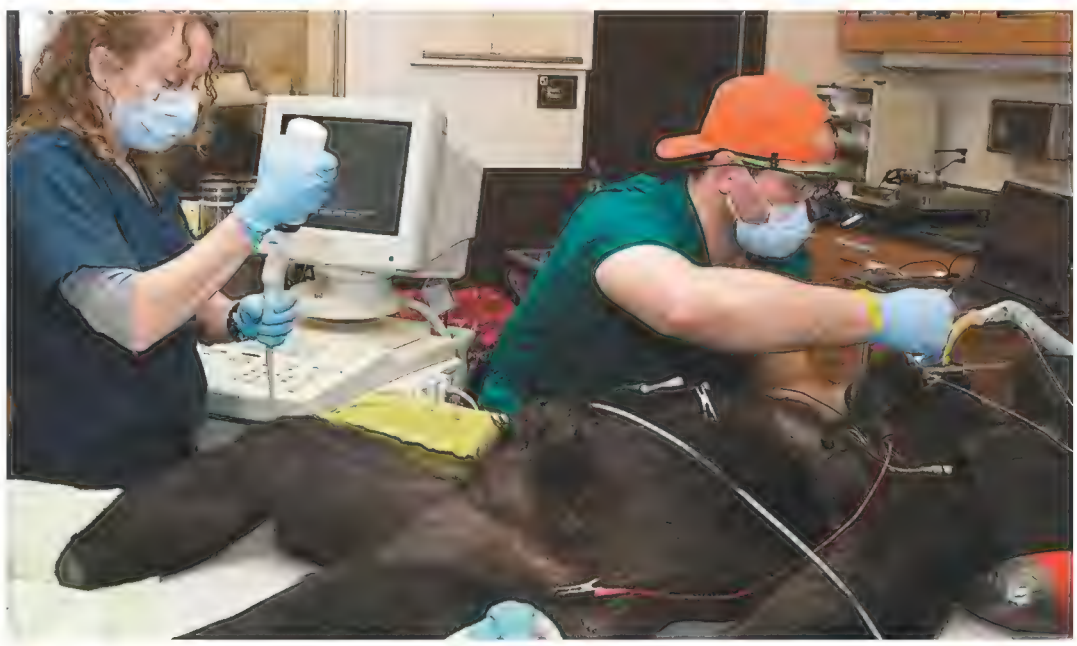
How often do you get exotic patients such as Kigali?
Sometimes months will go by without hearing from the zoo. But there are times when I make frequent house calls. I've been there four out of the last five weeks. I started with a root canal on Draco, a cheetah. The next week it was Luke, a lion. Then I did Bonnie, an armadillo. Then Kigali.

What's it like to work on a gorilla?
Well, she is only the second gorilla I've ever worked on. The other one was a male at the Dallas Zoo during my residency. Kigali was fine. It was pretty much a straightforward root canal.

Are root canals for gorillas similar to those for humans?
It's exactly the same. Apes have the same number of teeth as we do—except bigger! Their canine teeth are much more prominent than ours. But she was a female, so hers weren't that big.

Did you think, "Please don't wake up"?
No, I trust the zoo veterinarians. I'm not concerned that an animal is going to wake up and bite me. I would never do exotic work without somebody knowing what they're doing, in terms of the anesthesia.

So, do gorillas have bad breath?
Any animal can have bad breath. I can tell when some dogs walk through the door there's something bad going on. Kigali didn't have bad breath. But gorillas do have a distinctive body odor. It's hard to describe. But when I smell it, I think, "Yep, that's a gorilla."



Read more of our interview with Barron Hall at Smithsonian.com/hall

COURTESY OF BARRON HALL; MEHGAN MURPHY / NZP, SI

What's Up

VISIONARY DESIGNERS

In 1996, Joshua Silver invented Adaptive Eyeglasses (right) with syringes of fluid that allow the world's poor to inexpensively adjust lens prescriptions. See how designers address social and environmental issues in "Why Design Now?" starting May 14 at New York City's Cooper-Hewitt.

LARGER THAN LIFE

Stroll among Bob Creamer's gigantic digital images of birds and flowers (right: *Water Lily Garden*, 2004) through May 23 at the California University of Pennsylvania.

TAKE TO THE SKIES

Though he died at age 34, Yves Klein took the art world by storm during his eight-year career. See his pieces (left: *The Dream of Fire,* 1961) starting May 20 at the Hirshhorn Museum.

A CHANGE OF SCENE

Chinese artist Hai Bo switched from painting to photography to capture rural life (right: *Four Seasons: Summer,* 2003). His show runs through February 27, 2011, at the Sackler Gallery.

BROUGHT TO LIGHT

Through May 23, come face to face with creatures from the darkest depths of the Atlantic (left: *Cirrate Octopod* by David Shale, 2004) in the Natural History Museum exhibit "Deeper Than Light."

BY ERICA R. HENDRY

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TOYOTA
moving forward

THIS MONTH IN HISTORY

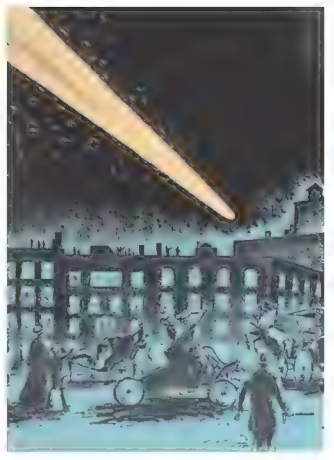
MAY ANNIVERSARIES
MOMENTOUS OR MERELY MEMORABLE

BY ALISON McLEAN

30 YEARS AGO
THAR SHE BLOWS

When an earthquake shakes Washington's Mount St. Helens on May 18, 1980, it explodes with a blast that takes 1,314 feet off the volcano's top and shoots ash 80,000 feet into the air. The nine-hour eruption—which kills 57 people and levels 230 square miles of forest—is the most destructive in recorded United States history.

100 YEARS AGO
GAS PANIC!



The approach of Halley's comet—and the Earth's passage through its tail—causes a commotion in May 1910. As sales of telescopes boom, widespread panic, fueled by yellow journalism speculation about the poison gas in the tail, prompts everything from prayer meetings to suicides. Chicagoans stuff keyholes with cotton; a Cleveland man, believing the world will end, is reportedly driven insane by fear. On May 19, the Earth spends six hours in the comet's tail with adverse effects limited to "comet neck" from rooftop viewing parties. The comet, which last visited in 1986, is due back in 2061.

50 YEARS AGO BEAMING UP

American physicist Theodore Maiman, 33, demonstrates the first optical laser at Hughes Research Labs in California, May 16, 1960. Racing many other labs to develop a working laser, a possibility predicted two years before, Maiman uses a synthetic ruby, a material rejected by other scientists, energized by a pulsing light source (instead of a continuous light others preferred). Once his success is announced, reporters repeatedly ask Maiman about his "death-ray," but the scientist envisions largely peaceful uses, including long-distance communication, today a reality with fiber optics. Maiman dies in 2007.

50 YEARS AGO COUNTERPRODUCTIVE

The Food and Drug Administration approves Enovid, the first contraceptive pill, on May 9, 1960. Previously marketed for menstrual disorders, the progestin/estrogen combination drug had been tested in Puerto Rico, Haiti and Mexico, since laws in many U.S. states restricted birth control. The drug's approval, says FDA Associate Commissioner John Harvey, is based on safety: "Our own ideas of morality had nothing to do with the case." The pill helps propel the growing women's rights movement, and today, some 12 million American women take oral contraceptives.

40 YEARS AGO FOUR DEAD IN OHIO

At Kent State University, a weekend of confrontation between the Ohio National Guard and campus crowds protesting the Vietnam War and the U.S. invasion of Cambodia turns tragic on Monday, May 4, 1970, when, to disperse a rally, 28 guardsmen open fire on the demonstrators. Four students are killed and nine are wounded. Reaction includes a national strike by four million students. Subsequent trials will determine that the guards justifiably feared for their lives, but the shootings intensify the country's polarization over the Vietnam War and the administration of President Nixon.

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This Detroit scene was repeated across the nation, January 16, 1920, as shoppers stocked up on the last day before Prohibition took effect.

THE MAN WHO TURNED OFF THE TAPS

Prohibition touched every American life. It couldn't have happened without Wayne B. Wheeler

BY DANIEL OKRENT

ON THE LAST DAY BEFORE THE TAPS RAN DRY, the streets of San Francisco were jammed. A frenzy of cars, trucks, wagons and every other imaginable form of conveyance crisscrossed the town and battled its steepest hills. Porches, staircase landings and sidewalks were piled high with boxes and crates delivered just before transporting their contents would become illegal. Across the country in New York City, Gold's Liquor Store placed wicker baskets filled with its remaining inventory on the sidewalk; a sign read, "Every bottle, $1."

On the first day of Prohibition, January 17, 1920, Bat Masterson, a 66-year-old relic of the Wild West now playing out the string as a sportswriter in New York, sat alone in his favorite bar, glumly contemplating a cup of tea. In Detroit that night, federal officers shut down two illegal stills (an act that would become common in the years ahead) and reported that their operators had offered bribes (which would become even more common). On the Maine-Canada border, reported a New Brunswick paper, "Canadian liquor in quantities from one gallon to a truckload is being hidden in the northern woods and distributed by automobile, sled and iceboat, on snowshoes and skis."

The crusaders who had struggled for decades to place Prohibition in the Constitution celebrated with rallies, prayer sessions and ritual interments of effigies representing John Barleycorn, the symbol of alcohol's evils. "Men will walk upright now, women will smile and the children will laugh," the evangelist Billy Sunday told the 10,000 people who gathered at his tabernacle in Norfolk, Virginia. "Hell will be forever for rent."

But Interior Secretary Franklin K. Lane may have provided the most accurate view of the United States of America on the edge of this new epoch 90 years ago. "The whole world is skew-jee, awry, distorted and altogether perverse," Lane wrote in a letter on January 19. " . . . All goes merry as a dance in hell."

How did it happen? How did a freedom-loving people decide to give up a private right that had been freely exercised by millions since the first European colonists arrived in the New World? How did they condemn to extinction what was, at the very moment of its death, the fifth-largest industry in the nation? How did they append to their most sacred document 112 words that knew only one precedent in American history? With that single previous exception, the original Constitution and its first 17 amendments concerned the activities of government, not of citizens. Now there were two exceptions: you couldn't own slaves, and you couldn't buy alcohol.

But in its scope, Prohibition was much, much more complicated than that, initiating a series of innovations and alterations revolutionary in their impact. The men and women of the temperance movement created a template for political activism that is still followed a century later. They also abetted the creation of a radical new system of federal taxation, lashed their domestic goals to the conduct of World War I and carried female suffrage to the brink of passage.

Wayne B. Wheeler (left) perfected the tactic of using electoral minorities to sway close races and turned the Anti-Saloon League (right: convening in Atlantic City in 1915) into a pro-Prohibition powerhouse. A New York newspaper called him "the legislative bully before whom the Senate of the United States sits up and begs."

And the 18th Amendment, ostensibly addressing the single subject of intoxicating beverages, would set off an avalanche of change in areas as diverse as international trade, speedboat design, tourism practices and the English language. It would provoke the establishment of the first nationwide criminal syndicate, the idea of home dinner parties, the deep engagement of women in political issues other than suffrage and the creation of Las Vegas.

Prohibition fundamentally changed the way we live. *How the hell did that happen?*

It happened, to a large degree, because Wayne Wheeler made it happen.

HOW DOES ONE BEGIN to describe the impact of Wayne Bidwell Wheeler? You could do worse than to begin at the end, with the obituaries that followed his death, at 57, in 1927—obituaries, in the case of those quoted here, from newspapers that by and large disagreed with everything he stood for. The *New York Herald Tribune*: "Without Wayne B. Wheeler's generalship it is more than likely we should never have had the Eighteenth Amendment." The *Milwaukee Journal*: "Wayne Wheeler's conquest is the most notable thing of our times." The Baltimore *Evening Sun* had it absolutely right and at the same time completely wrong: "Nothing is more certain than that when the next history of this age is examined by dispassionate men, Wheeler will be considered one of its most extraordinary figures." No one remembers, but he was.

Wheeler was a small man, 5-foot-6 or 7. Wire-rimmed glasses, a tidy mustache, eyes that crinkled at the corners when he ventured one of the tight little smiles that were his usual reaction to the obloquy of his opponents—even at the peak of his power in the 1920s, he looked more like a clerk in an insurance office than a man who, in the description of the militantly wet *Cincinnati Enquirer*, "made great men his puppets." On his slight frame he wore a suit, a waistcoat and, his followers believed, the fate of the Republic.

Born on a farm near Youngstown, Ohio, in 1869, he was effectively born anew in 1893, when he found himself in a Congregational church in Oberlin, Ohio, listening to a temperance lecture delivered by the Rev. Howard Hyde Russell, a former lawyer who had recently founded an organization called the Anti-Saloon League (ASL). Wheeler had put himself through Oberlin College by working as a waiter, janitor, teacher and salesman. Now, after joining Russell in prayer, he signed on as one of the first full-time employees of the ASL, which he would turn into the most effective political pressure group the country had yet known.

It was, in fact, Wheeler who coined the term "pressure group." When he teamed up with Russell in 1893, the tem-

GRANGER COLLECTION, NEW YORK; PP. 30-31 WALTER P. REUTHER LIBRARY, WAYNE STATE UNIVERSITY

perance movement that had begun to manifest itself in the 1820s had hundreds of thousands of adherents but diffuse and ineffectual leadership. The most visible anti-alcohol leader, Frances Willard of the Woman's Christian Temperance Union (WCTU), had diluted her organization's message by embracing a score of other issues, ranging from government ownership of utilities to vegetarianism. The nascent Prohibition Party had added forest conservation and post office policy to its anti-liquor platform. But Russell, with Wheeler by his side, declared the ASL interested in one thing only: the abolition of alcohol from American life.

Their initial objective was a law in every state banning its manufacture and sale. Their tactics were focused. A politician who supported anti-liquor laws could count on the league's support, and a politician who did not could count on its ferocious opposition. "The Anti-Saloon League," Russell said, "is formed for the purpose of administering political retribution."

Wheeler became its avenging angel. Years later he said he joined the ASL because he was inspired by the organization's altruism and idealism. But despite all the tender virtues he may have possessed, none was as essential as a different quality, best summarized by a classmate's description: Wayne Wheeler was a "locomotive in trousers." While clerking for a Cleveland lawyer and attending classes at Western Reserve Law School, Wheeler worked full time for the league, riding his bicycle from town to town to speak to more churches, recruit more supporters. After he earned his law degree in 1898 and took over the Ohio ASL's legal office, his productivity only accelerated. He initiated so many legal cases on the league's behalf, delivered so many speeches, launched so many telegram campaigns and organized so many demonstrations ("petitions in boots," he called them) that his boss lamented that "there was not enough Mr. Wheeler to go around."

Soon Wheeler and the ASL had effective control of the Ohio legislature. They had opposed 70 sitting legislators of both parties (nearly half the entire legislative membership) and defeated every one of them. Now the state could pass a law that had long been the league's primary goal: a local-option bill that would put power over the saloon directly in voters' hands. If Cincinnatians voted wet, Cincinnati would be wet; if Daytonites voted dry, they would be dry.

After different versions of the measure had passed both houses of the legislature, Gov. Myron T. Herrick persuaded members of the conference committee to adopt some modifications he deemed necessary to make the law workable and equitable. To the league, this was heresy. After Herrick signed the amended bill into law in the election year of 1905, Wheeler, playing for stakes greater than the ASL had ever risked before, took him on directly.

The governor was no easy target. A lawyer and banker from Cleveland, he was the political creation of Senator Mark Hanna, the Republican Boss of Bosses. In 1903, Herrick had been elected governor with the largest plurality in Ohio history; for the 1905 campaign, he had substantial campaign funds, as well as the goodwill of many a churchgoer for having vetoed a bill that would have legalized racetrack betting. And Ohio Republicans had lost only one gubernatorial election in almost two decades.

Wheeler and the ASL sponsored more than 300 anti-Herrick rallies throughout the state and mobilized their supporters in the churches by suggesting that the governor—"the champion of the murder mills"—was a pawn of the liquor interests. When the Brewers' Association sent out a confidential letter urging its members to lend quiet but material support to Herrick (his Democratic opponent was a vocal temperance advocate), Wheeler said he "got [a copy of the letter] on Thursday before election, photographed it and sent out thousands of them to churches on Sunday." In a race that drew what was at the time the largest turnout for an Ohio gubernatorial election, every other Republican on the statewide ticket was elected, but Myron Herrick's political career was over.

"Never again," Wheeler boasted, "will any political party ignore the protests of the church and the moral forces of the state." Nor, in a word, would they ignore Wayne B. Wheeler.

PP. 32-33 LIBRARY OF CONGRESS, LC-USZ62-10443

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THE ASL'S STATE-BY-STATE CAMPAIGN was reasonably effective, particularly in the South. But in 1913, two events led the organization to adopt a new strategy. First, Congress overrode President William Howard Taft's veto of something called the Webb-Kenyon Act, which outlawed the importation of alcoholic beverages into a dry state. The stunning 246 to 95 override vote in the House of Representatives showed not just the power of the anti-liquor forces but also how broadly representative they had become.

The override was followed by enactment of a national income tax authorized by the recently ratified 16th Amendment. Until 1913, the federal government had depended on liquor taxes for as much as 40 percent of its annual revenue. "The chief cry against national Prohibition," the ASL's executive committee said in a policy statement that April, "has been that the government must have the revenue." But with an income tax replacing the levy on liquor, that argument evaporated, and the ASL could move beyond its piecemeal approach and declare its new goal: "National Prohibition, [to] be secured through the adoption of a Constitutional Amendment."

The ASL statement called this new policy "The Next and Final Step." But the league could not take that step without extracting Wheeler from Ohio and sending him to Washington. Although that didn't happen officially until 1916, Wheeler's domination of the highest councils of the ASL began with the 1913 decision to push for a Prohibition amendment. Shuttling between Columbus and the ASL's Washington office, he displayed the strategic savvy and the unstoppable drive that would eventually lead the editors of the New York *Evening World* to proclaim him "the legislative bully before whom the Senate of the United States sits up and begs."

The Woman's Christian Temperance Union (top: in 1909) and the Rev. Billy Sunday (bottom: c. 1917) fought the demon rum.

By the time Wheeler stepped onto the national stage, he had long since mastered his legislative parlor tricks. When Lincoln Steffens had visited Columbus several years earlier, Wheeler explained his tactics to the great muckraker. "I do it the way the bosses do it, with minorities," Wheeler said. By delivering his voters to one candidate or another in a close race, he could control an election: "We'll vote against all the men in office who won't support our bills. We'll vote for candidates who will promise to." Wheeler, who had greeted Steffens amiably—"as a fellow reformer," Steffens recalled— now "hissed his shrewd, mad answer" to those politicians who would betray ASL voters: "We are teaching these crooks that breaking their promises to us is surer of punishment than going back on their bosses, and some day they will learn that all over the United States—and we'll have national Prohibition."

A constitutional amendment mandating such a thing required a two-thirds majority in each house of Congress as well as legislative majorities in 36 states. Wheeler's skill at achieving majorities by manipulating minorities freed the ASL from the more cumbersome referendum and initiative movement. When voters were offered a simple yes-or-no, dry-or-wet choice on a ballot measure, a minority was only a minority. But when two candidates in an election could be differentiated by isolating one issue among many, Wheeler's minority could carry the day. A candidate with, say, the support of 45 percent of the electorate could win with the added votes of the ASL bloc. In other words, in legislative elections, the power of Wheeler's minority could be measured in multiples.

A RESOLUTION CALLING for a Prohibition amendment had been introduced in nearly every Congress since 1876, but none had ever emerged from committee. And no version of a female suffrage amendment had gotten as far as floor debate in two decades. But in the congressional session of 1914, both were reported out of committee on the same day.

This was no coincidence. The suffrage movement had long shared a constituency with the anti-liquor movement. Frances Willard and the WCTU campaigned actively for both causes. Susan B. Anthony had first become involved in securing the vote for women when she was denied the right to speak at a temperance convention in 1852 in Albany, New York. By 1899, after half a century of suffrage agitation, Anthony attempted to weld her movement to the Prohibition drive. "The only hope of the Anti-Saloon League's success," she told an ASL official, "lies in putting the ballot into the hands of women." In 1911, Howard Russell's successor as the league's nominal leader, Purley A. Baker, agreed. Women's suffrage, he declared, was "the antidote" to the efforts of the beer and liquor interests.

This was not the only alliance that the ASL made with other movements. Though in its public campaigns it stuck to its single issue, the league had worked with Western populists to secure ratification of the income tax amendment. It made common cause with progressives who were fighting the political power of the saloons in order to bring about the "uplift" of urban immigrants. In the South, Prohibitionists stood side by side with racists whose living nightmare

GETTY IMAGES; LIBRARY OF CONGRESS, LC-DIG-GGBAIN-06295

was the image of a black man with a bottle in one hand and a ballot in the other.

Such alliances enabled the dry forces to make their first congressional impact on December 22, 1914, when a version of a Prohibition amendment came up for a vote before the entire House of Representatives. The final tally was 197 for, 190 against—not the two-thirds majority the Constitution required, but an astonishing victory, nonetheless. Dry votes came from both parties and from every part of the country. Nearly two-thirds of the affirmative voters lived in towns with fewer than 10,000 people, but among the House members of the largely urban Progressive Party, 17 of the 18 who voted went dry.

The ASL's assiduous attention to Congress had made wet politicians wobble, uncertain politicians sprint for dry shelter and dry politicians flex their biceps. Heading toward the 1916 elections, the league's political expenditures exceeded the 2010 equivalent of $50 million in a single year.

By Election Day, the ASL's leadership, its publicists and its 50,000 lecturers, fund-raisers and vote counters had completed their work. While the rest of the nation remained in suspense as the votes in the 1916 presidential balloting were counted in California—the state's 13 electoral votes would re-elect Woodrow Wilson—the managers of the ASL slept comfortably.

"We knew late election night that we had won," Wheeler would recall a decade later. The league, he wrote, had "laid down such a barrage as candidates for Congress had never seen before." Every wet measure on every statewide ballot was defeated. Four more states had voted themselves dry, including Michigan, the first Northern industrial state to make the leap. Some form of dry law was now on the books in 23 states. And, wrote Wheeler, "We knew that the Prohibition amendment would be submitted to the States by the Congress just elected."

SHORTLY AFTER THAT CONGRESS was sworn in, Senator Morris Sheppard of Texas introduced the resolution that would become the 18th Amendment. Sheppard was a Yale man, a Shakespeare scholar and one of the Senate's leading progressive figures. But all that mattered to Wheeler was that Sheppard also believed that the liquor sellers preyed most dangerously on the poor and uneducated.

In fact, Wheeler's devotion to the dream of a dry America accommodated any number of unlikely allies. Billy Sunday, meet pioneering social worker Jane Addams: you're working together now. The evangelical clergy of the age were motivated to support Prohibition because of their faith; reformers like Addams signed on because of the devastating effect that drunkenness had on the urban poor. Ku Klux Klan, shake hands with the Industrial Workers of the World (IWW): you're on the same team. The Klan's anti-liquor sentiment was rooted in its hatred of the immigrant masses in liquor-soaked cities; the IWW believed that liquor was a capitalist weapon used to keep the working classes in a stupor.

After the Sheppard amendment passed both houses of Congress with gigantic majorities in late 1917, Wheeler turned to what most political figures believed to be a much tougher battle, a state-by-state ratification campaign. The drys would need to win over both legislative houses in at least 36 states to reach the three-quarters requirement.

NEW YORK DAILY NEWS

Americans drank even after Wayne Wheeler got Prohibition passed, despite attempts to enforce the law (above: draining 10,000 barrels of beer into New York Harbor in 1925). A Detroit newsman wrote that it was impossible to get a drink "unless you walked at least ten feet and told the busy bartender what you wanted in a voice loud enough for him to hear you above the uproar."

To the shock of many, ratification would come with astonishing velocity. For years the ASL's vast national organization had been mobilizing its critical minority of voters to carry legislative elections in every state. But what really put across ratification in an eventual 46 states (Connecticut and Rhode Island were the only holdouts) had nothing to do with political organizing. The income tax had made a Prohibition amendment fiscally feasible. The social revolution wrought by the suffragists had made it politically plausible. Now Wheeler picked up the final tool he needed to wedge the amendment into the Constitution: a war.

A dry Wisconsin politician named John Strange summarized how the ASL was able to use World War I to attain its final goal: "We have German enemies across the water," Strange said. "We have German enemies in this country, too. And the worst of all our German enemies, the most treacherous, the most menacing, are Pabst, Schlitz, Blatz and Miller." That was nothing compared with the anti-German—and pro-Prohibition—feeling that emerged from a Senate investigation of the National German-American Alliance (NGAA), a civic group that during the 1910s had spent much of its energy opposing Prohibition.

The Senate hearings were a disaster for wets. At a time when most Amerians reviled all things German—when the governor of Iowa declared that speaking German in public was unlawful, and playing Beethoven was banned in Boston, and sauerkraut became known as "liberty cabbage"—the NGAA was an easy target. When the hearings revealed that NGAA funds came largely from the beer barons, and that beer money had secretly secured the purchase of major newspapers in several cities, ratification proceeded, said the *New York Tribune*, "as if a sailing-ship on a windless ocean were sweeping ahead, propelled by some invisible force."

"Invisible" was how Wayne Wheeler liked it. In fact, he had personally instigated, planned and materially abetted the Senate inquiry—inquisition, really—into the NGAA. "We are not willing it be known at present that we started the investigation," Wheeler told a colleague. But he added, "You have doubtless seen the way the newspapers have taken up the German-American Alliance. They are giving it almost as much attention as the Acts of Congress itself."

The Senate hearings had begun on September 27, 1918. Less than four months later, Nebraska ratified (by a 96 to 0 vote in its lower house), and the 18th Amendment was embedded in the Constitution. From the moment of submission, it had taken 394 days to meet the approval of 36 state legislatures—less than half as long as it had taken 11 of the first 14 states to approve the Bill of Rights.

The bootleg trade gave rise to organized crime (above left: Al Capone in 1930). Speak-easies (above right: in New York City in 1933) were so popular among patrons of both sexes that *Life* magazine assigned Margaret Bourke-White a photo essay on them.

GETTY IMAGES; MARGARET BOURKE-WHITE / TIME LIFE PICTURES / GETTY IMAGES

NOT SEVEN YEARS AFTER Prohibition took effect, on January 17, 1920 (the amendment had stipulated it would go into effect one year after ratification), Wayne B. Wheeler died. He had taken a rare vacation on Lake Michigan when his wife was killed in a freak fire and his father-in-law thereupon was felled by a heart attack. Wheeler had been in ill health for months; the vacation that he had hoped would restore him instead led to his own death by heart failure just three weeks after the fire.

See how favorite Prohibition-era cocktails are made at Smithsonian.com/prohibition

Until virtually the end, Wheeler remained as effective as he had been in the years leading up to the passage of the 18th Amendment. He was intimately involved in the drafting of the Volstead Act, which specified the means of enforcing the Prohibition amendment. All subsequent legislation refining the liquor-control laws required his imprimatur. He still determined whether candidates for Congress would receive the ASL's endorsement. And he underscored his authority by supervising a gigantic patronage operation, controlling appointments to the Prohibition Bureau, which was set up to police the illegal liquor trade.

But for all his political might, Wheeler could not do what he and all the other Prohibitionists had set out to do: they could not purge alcoholic beverages from American life. Drinking did decline at first, but a combination of legal loopholes, personal tastes and political expediency conspired against a dry regime.

As declarative as the 18th Amendment was—forbidding "the manufacture, sale, or transportation of intoxicating liquors"—the Volstead Act allowed exceptions. You were allowed to keep (and drink) liquor you had in your possession as of January 16, 1920; this enabled the Yale Club in New York, for instance, to stockpile a supply large enough to last the full 14 years that Prohibition was in force. Farmers and others were allowed to "preserve" their fruit through fermentation, which placed hard cider in cupboards across the countryside and homemade wine in urban basements. "Medicinal liquor" was still allowed, enriching physicians (who generally charged by the prescription) and pharmacists (who sold such "medicinal" brands as Old Grand-Dad and Johnnie Walker). A religious exception created a boom in sacramental wines, leading one California vintner to sell communion wine—legally—in 14 different varieties, including port, sherry, tokay and cabernet sauvignon.

By the mid-'20s, those with a taste for alcohol had no trouble finding it, especially in the cities of the East and West coasts and along the Canadian border. At one point the New York police commissioner estimated there were 32,000 illegal establishments selling liquor in his city. In Detroit, a newsman said, "It was absolutely impossible to get a drink . . . unless you walked at least ten feet and told the busy bartender what you wanted in a voice loud enough for him to hear you above the uproar." Washington's best-known bootlegger, George L. Cassiday (known to most people as "the man in the green hat"), insisted that "a majority of both houses" of Congress bought from him, and few thought he was bragging.

Worst of all, the nation's vast thirst gave rise to a new phenomenon—organized crime, in the form of transnational syndicates that controlled everything from manufacture to pricing to distribution. A corrupt and underfunded Prohibition Bureau couldn't begin to stop the spread of the syndicates, which considered the politicians who kept Prohibition in place their greatest allies. Not only did Prohibition create their market, it enhanced their profit margins: from all the billions of gallons of liquor that changed hands illegally during Prohibition, the bootleggers did not pay, nor did the government collect, a single penny of tax.

In fact, just as tax policy, in the form of the income tax amendment, had paved the way for Prohibition, so did it shape Prohibition's eventual death. Rampant criminality, epidemic disrespect for law and simple exhaustion had turned much of the country against the 18th Amendment by the late '20s, but the arrival of the Great Depression sealed the deal. As income tax revenues plummeted along with incomes, the government was running on empty. With the return of beer alone, Franklin Roosevelt said during his 1932 campaign, the federal treasury would be enriched by hundreds of millions of dollars.

With repeal, in December 1933, citizens nationwide (as in New York City) raised a legal glass for the first time in 13 years.

On December 5, 1933, Utah became the 36th state to ratify the 21st Amendment and Prohibition came to an inglorious end. That was a little more than six years after the death of the man who had brought it to life. In a posthumous biography written by a former colleague, Wayne B. Wheeler was described as a man who "controlled six Congresses, dictated to two Presidents . . . directed legislation . . . for the more important elective state and federal offices, held the balance of power in both Republican and Democratic parties, distributed more patronage than any dozen other men, supervised a federal bureau from outside without official authority, and was recognized by friend and foe alike as the most masterful and powerful single individual in the United States."

And then, almost immediately, he was forgotten.

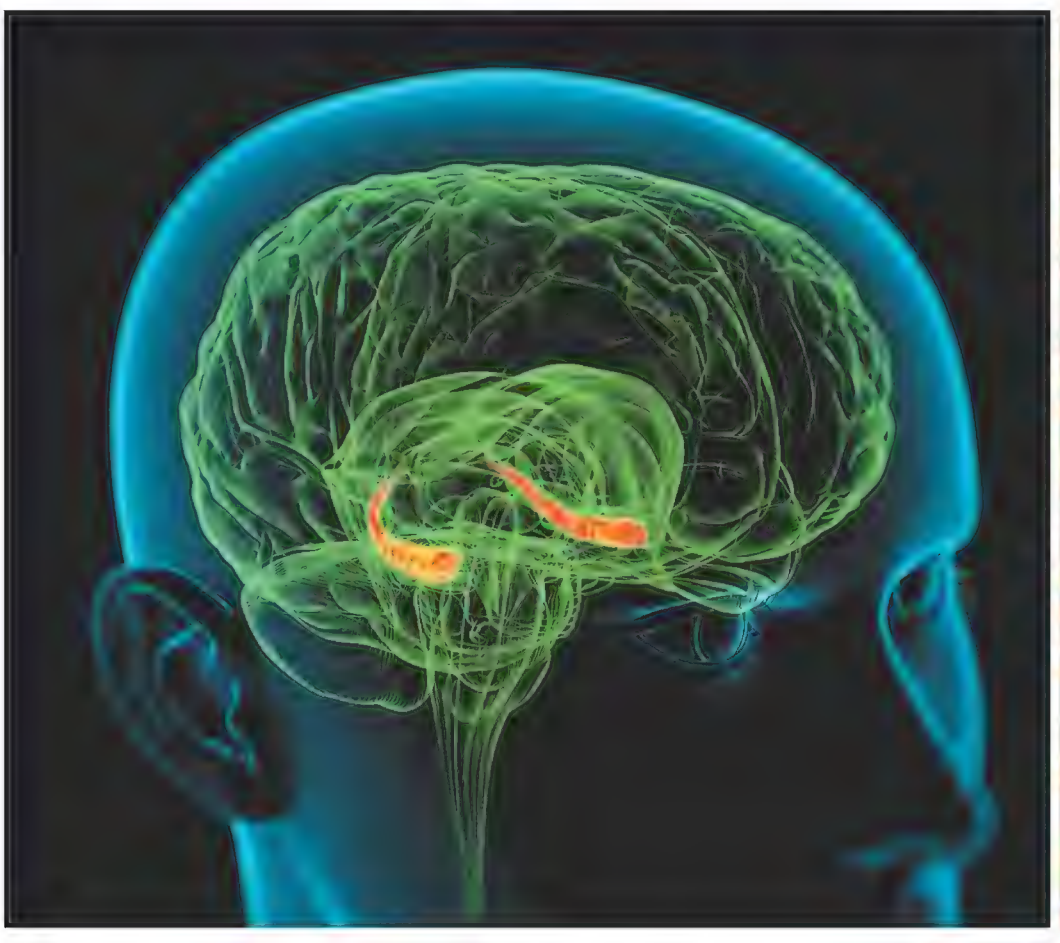
HULTON ARCHIVE / GETTY IMAGES

MAKING

MEMORIES

Does your memory play tricks on you? New research may explain why—and even help some people make peace with their past **BY GREG MILLER**

PORTRAITS BY GILLES MINGASSON



Karim Nader (opposite: at McGill University) challenged orthodox ideas about the nature of memories, which are stored by the brain region called the hippocampus (above left: in red in a computer illustration), where microscopic nerve cells (above right: stained green) are connected in dense networks that encode information.

Sitting at a sidewalk café in Montreal on a sunny morning, Karim Nader recalls the day eight years earlier when two planes slammed into the twin towers of the World Trade Center. He lights a cigarette and waves his hands in the air to sketch the scene.

At the time of the attack, Nader was a postdoctoral researcher at New York University. He flipped the radio on while getting ready to go to work and heard the banter of the morning disc jockeys turn panicky as they related the events unfolding in Lower Manhattan. Nader ran to the roof of his apartment building, where he had a view of the towers less than two miles away. He stood there,

stunned, as they burned and fell, thinking to himself, "No way, man. This is the wrong movie."

In the following days, Nader recalls, he passed through subway stations where walls were covered with notes and photographs left by people searching desperately for missing loved ones. "It was like walking upstream in a river of sorrow," he says.

Like millions of people, Nader has vivid and emotional memories of the September 11, 2001, attacks and their aftermath. But as an expert on memory, and, in particular, on the malleability of memory, he knows better than to fully trust his recollections.

Most people have so-called flashbulb memories of where they were and what they were doing when something momentous happened: the assassination of President John F. Kennedy, say, or the explosion of the space shuttle Challenger. (Unfortunately, staggeringly terrible news seems to come out of the blue more often than staggeringly good news.) But as clear and detailed as these memories feel, psychologists find they are surprisingly inaccurate.

Nader, now a neuroscientist at McGill University in Montreal, says his memory of the World Trade Center attack has played a few tricks on him. He recalled seeing

works. In short, Nader believes that the very act of remembering can change our memories.

Much of his research is on rats, but he says the same basic principles apply to human memory as well. In fact, he says, it may be impossible for humans or any other animal to bring a memory to mind without altering it in some way. Nader thinks it's likely that some types of memory, such as a flashbulb memory, are more susceptible to change than others. Memories surrounding a major event like September 11 might be especially susceptible, he says, because we tend to replay them over and over in our minds and in conversation with others—with each repetition having the potential to alter them.

For those of us who cherish our memories and like to think they are an accurate record of our history, the idea that memory is fundamentally malleable is more than a little disturbing. Not all researchers believe Nader has proved that the process of remembering itself can alter memories. But if he is right, it may not be an entirely bad thing. It might even be possible to put the phenomenon to good use to reduce the suffering of people with post-traumatic stress disorder, who are plagued by recurring memories of events they wish they could put behind them.

Researchers often study "flashbulb memories," our seemingly photographic mental images of startling events (from left: the space shuttle Challenger explosion in 1986, President and Jacqueline Kennedy just before his assassination in 1963, the terrorist attacks of September 11, 2001). But even such vivid memories can become distorted—possibly by the very act of recalling them.

AP IMAGES; PP. 40-41 AP IMAGES; P. 39 PHOTO RESEARCHERS, INC. (2)

television footage on September 11 of the first plane hitting the north tower of the World Trade Center. But he was surprised to learn that such footage aired for the first time the following day. Apparently he wasn't alone: a 2003 study of 569 college students found that 73 percent shared this misperception.

Nader believes he may have an explanation for such quirks of memory. His ideas are unconventional within neuroscience, and they have caused researchers to reconsider some of their most basic assumptions about how memory

NADER WAS BORN IN CAIRO, EGYPT. His Coptic Christian family faced persecution at the hands of Arab nationalists and fled to Canada in 1970, when he was 4 years old. Many relatives also made the trip, so many that Nader's girlfriend teases him about the "soundtrack of a thousand kisses" at large family gatherings as people bestow customary greetings.

He attended college and graduate school at the University of Toronto, and in 1996 joined the New York University lab of Joseph LeDoux, a distinguished neuroscientist

who studies how emotions influence memory. "One of the things that really seduced me about science is that it's a system you can use to test your own ideas about how things work," Nader says. Even the most cherished ideas in a given field are open to question.

Scientists have long known that recording a memory requires adjusting the connections between neurons. Each memory tweaks some tiny subset of the neurons in the brain (the human brain has 100 billion neurons in all), changing the way they communicate. Neurons send messages to one another across narrow gaps called synapses. A synapse is like a bustling port, complete with machinery for sending and receiving cargo—neurotransmitters, specialized chemicals that convey signals between neurons. All of the shipping machinery is built from proteins, the basic building blocks of cells.

One of the scientists who has done the most to illuminate the way memory works on the microscopic scale is Eric Kandel, a neuroscientist at Columbia University in New York City. In five decades of research, Kandel has shown how short-term memories—those lasting a few minutes—involve relatively quick and simple chemical changes to the synapse that make it work more efficiently. Kandel, who won a share of the 2000 Nobel Prize in Physiology or Medicine, found that to build a memory that lasts hours, days or years, neurons must manufacture new proteins and expand the docks, as it were, to make the neurotransmitter traffic run more efficiently. Long-term memories must literally be built into the brain's synapses. Kandel and other neuroscientists have generally assumed that once a memory is constructed, it is stable and can't easily be undone. Or, as they put it, the memory is "consolidated."

According to this view, the brain's memory system works something like a pen and notebook. For a brief time before the ink dries, it's possible to smudge what's written. But after the memory is consolidated, it changes very little. Sure, memories may fade over the years like an old letter (or even go up in flames if Alzheimer's disease strikes), but under ordinary circumstances the content of the memory stays the same, no matter how many times it's taken out and read. Nader would challenge this idea.

In what turned out to be a defining moment in his early career, Nader attended a lecture that Kandel gave at New York University about how memories are recorded. Nader got to wondering about what happens when a memory is recalled. Work with rodents dating back to the 1960s didn't jibe with the consolidation theory. Researchers had found that a memory could be weakened if they gave an animal an electric shock or a drug that interferes with a particular neurotransmitter just after they prompted the animal to recall the memory. This suggested that memories were vulnerable to disruption even after they had been consolidated.

Nader recalled seeing television footage on September 11 of the first plane hitting the north tower of the World Trade Center. But he was surprised to learn that such footage **aired for the first time the following day.**

AP IMAGES

To think of it another way, the work suggested that filing an old memory away for long-term storage after it had been recalled was surprisingly similar to creating it the first time. Both building a new memory and tucking away an old one presumably involved building proteins at the synapse. The researchers had named that process "reconsolidation." But others, including some prominent memory experts, had trouble replicating those findings in their own laboratories, so the idea wasn't pursued.

Nader decided to revisit the concept with an experiment. In the winter of 1999, he taught four rats that a high-pitched beep preceded a mild electric shock. That was easy—rodents learn such pairings after being exposed to them just once. Afterward, the rat freezes in place when it hears the tone. Nader then waited 24 hours, played the tone to reactivate the memory and injected into the rat's brain a drug that prevents neurons from making new proteins.

If memories are consolidated just once, when they are first created, he reasoned, the drug would have no effect on the rat's memory of the tone or on the way it would respond to the tone

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GILLES MINGASSON *is a photographer based in Los Angeles.*

Memories change the way nerves exchange signals at points of contact called synapses (above: magnified thousands of times, a nerve fiber, purple, meets a cell body, yellow).

in the future. But if memories have to be at least partially rebuilt every time they are recalled—down to the synthesizing of fresh neuronal proteins—rats given the drug might later respond as if they had never learned to fear the tone and would ignore it. If so, the study would contradict the standard conception of memory. It was, he admits, a long shot.

"Don't waste your time, this will never work," LeDoux told him.

It worked.

When Nader later tested the rats, they didn't freeze after hearing the tone: it was as if they'd forgotten all about it. Nader, who looks slightly devilish in his earring and pointed sideburns, still gets giddy talking about the experiment. Eyes wide with excitement, he slaps the café table. "This is crazy, right? I went into Joe's office and said, 'I know it's just four animals, but this is very encouraging!'"

AFTER NADER'S initial findings, some neuroscientists pooh-poohed his work in journal articles and gave him the cold shoulder at scientific meetings. But the data struck a more harmonious chord with some psychologists. After all, their experiments had long suggested that memory can easily be distorted without people realizing it.

In a classic 1978 study led by Elizabeth Loftus, a psychologist then at the University of Washington, researchers showed college students a series of color photographs depicting an accident in which a red Datsun car knocks down a pedestrian in a crosswalk. The students answered various questions, some of which were intentionally misleading. For instance, even though the photographs had shown the Datsun at a stop sign, the researchers asked some of the students, "Did another car pass the red Datsun while it was stopped at the yield sign?"

Later the researchers asked all the students what they had seen—a stop sign or yield sign? Students who'd been asked a misleading question were more likely to give an incorrect answer than the other students.

To Nader and his colleagues, the experiment supports the idea that a memory is re-formed in the process of calling it up. "From our perspective, this looks a lot like memory reconsolidation," says Oliver Hardt, a postdoctoral researcher in Nader's lab.

Hardt and Nader say something similar might happen with flashbulb memories. People tend to have accurate memories for the basic facts of a momentous event—for example, that a total of four planes were hijacked in the September 11 attacks—but often misremember personal details such as where they were and what they were doing at the time. Hardt says this could be because these are two different types of memories that get reactivated in different situations. Television and other media coverage reinforce the central facts. But recalling the experience to other people may allow distortions to creep in. "When you retell it, the memory becomes plastic, and whatever is present around you in the environment can interfere with the original content of the memory," Hardt says. In the days following September 11, for example, people likely repeatedly rehashed their own personal stories—"where were you when you heard the news?"—in conversations with friends and family, perhaps allowing details of other people's stories to mix with their own.

Since Nader's original experiment, dozens of studies with rats, worms, chicks, honeybees and college students have suggested that even long-standing memories can be disrupted when recalled. Nader's goal is to tie the animal research, and the clues it yields about the bustling molecular machinery of the synapse, to the everyday human experience of remembering.

Some experts think he is getting ahead of himself, especially when he makes connections between human memory and these findings in rats and other animals. "He oversells it a little bit," says Kandel.

Daniel Schacter, a psychologist at Harvard University who studies memory, agrees with Nader that distortions can occur when people reactivate memories. The question is whether reconsolidation—which he thinks Nader has demonstrated

"When you retell it, **the memory becomes plastic**, and whatever is present around you in the environment can interfere with the original content of the memory," says Oliver Hardt.

PHOTO RESEARCHERS, INC.

Memory is surprisingly malleable, says Elizabeth Loftus (at the University of California, Irvine). In a classic experiment, she found that people who saw pictures of a staged car crash could be led to misremember crucial details (below: people who saw the car at a stop sign were later tricked into thinking they'd seen a yield sign). Nader thinks he can explain this puzzling suggestibility.

compellingly in rat experiments—is the reason for the distortions. "The direct evidence isn't there yet to show that the two things are related," Schacter says. "It's an intriguing possibility that people will now have to follow up on."

A REAL-WORLD TEST of Nader's theory of memory reconsolidation is taking place a few miles from his Montreal office, at the Douglas Mental Health University Institute. Alain Brunet, a psychologist, is running a clinical trial involving people with post-traumatic stress disorder (PTSD). The hope is that caregivers might be able to weaken the hold of traumatic memories that haunt patients during the day and invade their dreams at night.

Brunet knows how powerful traumatic memories can be. In 1989, when he was studying for a master's degree in psychology at the University of Montreal, a man armed with a semiautomatic rifle walked into an engineering classroom on campus, separated the men from the women and shot the women. The gunman continued the massacre in other classrooms and hallways of the university's École Polytechnique, shooting 27 people and killing 14 women before killing himself. It was Canada's worst mass shooting.

Brunet, who was on the other side of campus that day, says, "this was a very powerful experience for me." He says he was surprised to discover how little was known at the time about the psychological impact of such events and how to help people who've lived through them. He decided to study traumatic stress and how to treat it.

Even now, Brunet says, the drugs and psychotherapy conventionally used to treat PTSD do not provide lasting relief for many patients. "There's still plenty of room for the discovery of better treatments," he says.

ELIZABETH LOFTUS (2)

Studies by Alain Brunet (opposite: at the Douglas Mental Health University Institute) show signs of helping people with post-traumatic stress disorder. Patients who recalled their trauma after taking a drug that disrupts memory formation felt less anxiety when later reminded of the event (above: Brunet's assistant Elena Saimon demonstrates).

In Brunet's first study, PTSD patients took a drug intended to interfere with the reconsolidation of fearful memories. The drug, propranolol, has long been used to treat high blood pressure, and some performers take it to combat stage fright. The drug inhibits a neurotransmitter called norepinephrine. One possible side effect of the drug is memory loss. (In a study similar to Nader's original experiment with rats, researchers in LeDoux's lab have found that the drug can weaken fearful memories of a high-pitched tone.)

The patients in Brunet's study, published in 2008, had each experienced a traumatic event, such as a car accident, assault or sexual abuse, about a decade earlier. They began a therapy session sitting alone in a nondescript room with a well-worn armchair and a television. Nine patients took a propranolol pill and read or watched TV for an hour as the drug took effect. Ten were given a placebo pill.

Brunet came into the room and made small talk before telling the patient he had a request: he wanted the patient to read a script, based on earlier interviews with the person, describing his or her traumatic experience. The patients, all volunteers, knew that the reading would be part of the experiment. "Some are fine, some start to cry, some need to take a break," Brunet says.

A week later, the PTSD patients listened to the script, this time without taking the drug or a placebo. Compared with the patients who had taken a placebo, those who had taken the propranolol a week earlier were now calmer; they had a smaller uptick in their heart rate and they perspired less.

Brunet has just completed a larger study with nearly 70 PTSD patients. Those who took propranolol once a week for six weeks while reading the script of their traumatic event showed an average 50 percent reduction in standard PTSD symptoms. They had fewer nightmares and flashbacks in their daily lives long after the effects of the drug had worn off. The treatment didn't erase the patients' memory of what had happened to them; rather, it seems to have changed the quality of that memory. "Week after week the emotional tone of the memory seems weaker," Brunet says. "They start to care less about that memory."

Nader says the traumatic memories of PTSD patients may be stored in the brain in much the same way that a memory of a shock-predicting tone is stored in a rat's brain. In both cases, recalling the memory opens it to manipulation. Nader says he's encouraged by the work so far with PTSD patients. "If it's got any chance of helping people, we have to give it a shot," he says.

Among the many questions that Nader is now pursuing is whether all memories become vulnerable when recalled, or only certain memories under certain circumstances.

The treatment seems to change the quality of the patients' traumatic memories. "Week after week **the emotional tone of the memory seems weaker**," Brunet says. "They start to care less about that memory."

Of course, there is the even bigger question: why are memories so unreliable? After all, if they were less subject to change we wouldn't suffer the embarrassment of misremembering the details of an important conversation or a first date.

Then again, editing might be another way to learn from experience. If fond memories of an early love weren't tempered by the knowledge of a disastrous breakup, or if recollections of difficult times weren't offset by knowledge that things worked out in the end, we might not reap the benefits of these hard-earned life lessons. Perhaps it's better if we can rewrite our memories every time we recall them. Nader suggests that reconsolidation may be the brain's mechanism for recasting old memories in the light of everything that has happened since. In other words, it just might be what keeps us from living in the past.

"The numbers are incredible," says photographer Eszterhas of the multitudes of migrating wildebeests that cross from Tanzania to Kenya and back each year.

DANGER AHEAD

Africa's wildebeest migration pits a million thundering animals against a gantlet of perils, even—some experts fear—climate change

BY ROBERT M. POOLE PHOTOGRAPHS BY SUZI ESZTERHAS

When the grass turns brittle and the streams run dry, the wildebeests grow restless. Milling in uneasy circles, scanning the horizon, sniffing the air for distant scents, the shaggy animals move slowly north, looking for the rains that bring new grass—and the promise of life for a population numbering some 1.2 million animals.

"It's amazing how keyed in they are to the rains," says Suzi Eszterhas, an American photographer who has lived among the wildebeests for years to document their perilous annual journey, which covers about a thousand looping miles. From the broad Serengeti grasslands on the plains of Tanzania, the wildebeests trudge west through low hills toward Lake Victoria, then northeast to the Masai Mara National Reserve in southern Kenya, a crucial refuge for water and

“There is so much drama during the crossings,” says Eszterhas, who waited for weeks to capture the wildebeests as they confronted the Mara River. “It’s easy to see why they are hesitant to make the swim. They have to hurl themselves off these cliffs (above and right). If heavy currents don’t drown them, the crocodiles are waiting to grab them (below).” Despite the migration’s daunting perils, most of the animals make their way to Kenya, a crucial refuge for grass and water in the dry season. Before the rains begin, the animals cross the river again, heading south for the breeding season.

grass in the July to November dry season.

"In the dry season, you see them bunch up on the plains," says Eszterhas. "The sky is empty except for one faraway rain cloud and—boom—within an hour they're off in a mass, thousands of wildebeests moving as one, all heading for that single cloud. The earth shudders when they go—you feel their migration as much as you hear or see it."

Most of it takes place within the Serengeti-Mara ecosystem, a patchwork of national parks, game preserves and conservation areas sprawling over some 10,000 square miles in Tanzania and Kenya. Wildebeests, also known as gnus, shape the ecosystem as they move. They crop grass and fertilize the land with their droppings, while lions, cheetahs, hyenas, crocodiles and other predators depend on them for protein.

Thousands of the ungainly, horned animals fall prey to predators each year, while others perish from broken bones and drowning. One of the most hazardous moments comes when the herd must swim across the Mara River, shortly after passing from Tanzania into Kenya. "Nobody knows why they pick a particular site to cross," says Eszterhas. "It's not always the same crossing and there seems to be no rhyme or rea-

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MAP: GUILBERT GATES

son to it. They congregate on the far side, running back and forth, crowding along the bank. They are so skittish when they come to the crossing."

And for good reason. Crocodiles position themselves nearby, picking off the animals as they flail in the water. Added to this, over the past three years, the Mara River has been running dangerously high, in part because of deforestation in the watershed. Eszterhas was on the bank of the river to meet the wildebeests during the migrations of 2006 through 2009. Camping in Kenya, she parked her Jeep beside the river for 12 or 13 hours a day and hid behind vegetation. "After several false starts, one animal would take the plunge, diving down the bank for the river, then another and another would follow. I was amazed that most of them survived that leap down the bank. Soon they were all in the water, this long line of wildebeests surging across. One would get in trouble, try to turn back in the swift current, and cause others to pile up at the crossing. You'd see the current take so many of them downstream—in a single crossing, at least 5,000 died because of the high waters. It was heartbreaking."

With human populations booming in East Africa, some scientists have expressed concern that the pressures of development, deforestation and poaching could challenge the wildebeest. The herd reached a near-historic peak of 1.5 million a decade ago and is now down to 1.2 million. The population may also be affected by more intense variations in seasonal flooding and drought, which might be the result of climate change, according to Mark E. Ritchie, a biologist at Syracuse University.

"There are a lot of maybes," he cautions. "But there is some scientific support that the downward trend in wildebeest numbers could very well be attributed to climate change." As the Indian Ocean warms and prevailing winds transport moisture over East Africa, more intense periods of rain and drought result, raising the prospect of a new threat to the Serengeti's keystone species and its migration. "It is very disturbing to think that the migration might be interrupted," says Eszterhas.

View more photos of the migration at Smithsonian.com/wildebeest

Breaking camp in Kenya, Eszterhas followed the herd to Serengeti National Park. There the animals feast on new grass (above), perform the rituals of courtship and dominance (left: yearling males spar) and produce calves for a new season. "The females are synchronized to calve at almost the same time," says Eszterhas. "The young ones are nursing in a few minutes and are ready to join the migration in a matter of weeks [opposite: a weeks-old calf with its mother]." Predators rely on the seasonal wildebeest bounty—just one reason the ruminants are considered a keystone species for the Serengeti.

SMITHSONIAN'S DESTINATION ★ AMERICA

Road Taken

A venerable Vermont byway offers an unparalleled access to old New England, from wandering moose to Robert Frost's hideaway cabin

BY JONATHAN KANDELL **Photographs by Jessica Scranton**

Route 100, studded with historic landmarks (opposite: Scott Bridge over the West River), "offers such remarkable visual experiences," says filmmaker Dorothy Lovering.

THE ROBERT FROST CABIN LIES TEN MILES WEST of Route 100, near the midway point in the road's 216-mile ramble through valleys, woods and farmlands between Massachusetts and Canada. Although I had driven to Vermont many times to ski, I had always taken the interstate, hellbent on reaching the slopes as quickly as possible. This time, however, I followed "The Road Not Taken," to quote the title of one of Frost's best-known poems, pausing at the Vermont cabin where he wrote many of them.

I crossed over covered bridges spanning sun-dappled rivers, past cornfields and grazing cows, into a landscape punctuated by churches with tall steeples and 18th-century brick houses behind white picket fences. A farmer rode a tractor across freshly mowed acreage; old-timers stared at me from a sagging porch at the edge of a dilapidated village. My trip included stops at a flourishing summer theater; an artisanal cheese maker in a state famous for its cheddars and chèvres; the 19th-century homestead of an American president; primeval hemlock stands and high passes strewn with massive, mossy boulders; and bogs where moose gather in the early evening. On either side of me rose Vermont's Green Mountains, the misty peaks that set its citizens apart from "flatlanders," as Vermonters call anyone—tourist or resident—who hails from across state lines.

Route 100 grew organically from roads connecting villages dating back to the 1700s, following the contours of the Vermont landscape. "It eventually became one continuous route, curving along rivers and through mountain valleys," says Dorothy A. Lovering, producer and director of a documentary about the storied country road. "That's why it offers such remarkable visual experiences."

The Frost log-and-wood slat cabin stands in a clearing outside the town of Ripton (pop. 566), where the poet spent summers

and wrote from 1939 until his death in 1963 at age 88. (Today, the farm, now a National Historic Landmark, belongs to Middlebury College, which maintains the property as a Frost memorial. The public has access to the grounds.) Behind a forest of 100-foot-tall Norwegian pines, the weathered cabin looks out on an apple orchard, a meadow carpeted in wildflowers and a farmhouse. The vista evokes an image from his poem "Out, Out—":

Five mountain ranges one behind the other
Under the sunset far into Vermont.

A visit to the site is bittersweet. On the night of December 28, 2007, vandals shattered windows, smashed antiques and damaged books inside the property's main farmhouse. The intruders caused more than $10,000 in damage. Fortunately, some of Frost's most cherished belongings—including his Morris chair and a lapboard the poet used as a writing surface—had already been moved to the Middlebury campus. Although marred in the rampage, Frost's pedal organ has been repaired and remains in the farmhouse. The cabin itself, where Frost etched a record of daily temperatures on the inside of the door, was not disturbed.

Twenty-eight young men and women—ages 16 to 22—were charged with trespassing or destruction of property, then turned over to poet Jay Parini, a Frost biographer and professor of literature at Middlebury, who taught the miscreants about Frost and his work. "I thought they responded well—sometimes, you could hear a pin drop in the room," recalls Parini. "But you never know what's going on in a kid's head."

I HAD BEGUN MY ROUTE 100 ODYSSEY by driving through that hallowed Vermont landmark—a covered bridge. Turning off Route 100 outside the town of Jamaica (pop. 946), I drove southeast for four miles to reach Scott Bridge—built in 1870 and named for Henry Scott, the farmer whose property anchored one end—in Townshend (pop. 1,149). Spanning the boulder-strewn West River, at 277 feet it is the longest of the state's 100 or so covered bridges—down from 500 a century ago.

"What's most fascinating about covered bridges is that they take you back to the origins of our country," says Joseph Nelson, author of *Spanning Time: Vermont's Covered Bridges*. Durability was their primary virtue: uncovered bridges were lashed by rain and snow. The wet wood attracted insects and fungus, then rotted away and had to be replaced every four or five years. Today, Vermont boasts covered bridges built in the early 1800s. In the 19th century, the interiors "doubled as local bulletin boards," writes Ed Barna in his *Covered Bridges of Vermont*. "Travelers stopping to wait out rainstorms or rest their teams could inspect the bills and placards advertising circuses, religious gatherings, city employment in the woolen mills, and nostrums like Kendall's Spavin Cure and Dr. Flint's Powder, two widely known remedies for equine ills."

Local officials specified that a covered bridge should be

Poet Robert Frost (below: c. 1926) purchased a farm—today a National Historic Landmark—in the town of Ripton in 1939. From the property's rustic cabin (above), which Frost used as a writing sanctuary, he looked out on an apple orchard, a meadow and a view that he evoked in his poem "Out, Out—": "Five mountain ranges one behind the other / Under the sunset far into Vermont."

P. 54 MAP: PIETARI POSTI / DEBUT ART; E.O. HOPPE / CORBIS (BOTTOM)

erected "a load of hay high and wide." A rusted plate over one entrance to Scott Bridge posts a speed limit: "Horses at a walk." But equines gave way to heavier motorized traffic, which weakened the structure. Since 1955, the bridge has been closed to all but pedestrian traffic.

About 25 miles north of Scott Bridge, just off Route 100, Vermont's oldest professional theater faces Weston's charming village green. (In 1985, the entire town, with its concentration of 18th- and 19th-century architecture, was placed on the National Register of Historic Places.) The Weston Playhouse opened in 1937 with a youthful Lloyd Bridges starring in Noel Coward's *Hay Fever*. The original theater, housed in a converted Congregational church, burned down in 1962, when an overheated gluepot caught fire. The church was quickly reconstructed, right down to its white-columned Greek Revival facade.

"Our audiences like the fact they are seeing some of Broadway's latest shows as soon as they are available," says Steve Stettler, who this summer is directing a production of *Death of a Salesman*. Stettler came to the playhouse in 1973 as an actor fresh out of Kenyon College in Ohio. For the current season, the playhouse will also offer *The 39 Steps*, a play

When Vermont's oldest theater, the Weston Playhouse (above left), opened in 1937, its first production featured 24-year-old Lloyd Bridges in Noel Coward's *Hay Fever*. In nearby Healdville, the Crowley Cheese Factory makes artisanal Colby by hand (above right: bricks sealed in wax). While Crowley may not generate huge profits, it makes "a great product," says Galen Jones.

based on the Alfred Hitchcock murder mystery, productions of the hit musicals *Avenue Q* and *Damn Yankees*, and the world première of *The Oath,* a drama focusing on a doctor caught in the horrors of the Chechen conflict.

Sixteen miles north, the hamlet of Healdville is home to the 128-year-old Crowley Cheese Factory, today owned by Galen Jones, who in his day job is a New York City television executive. He and his wife, Jill, own a house in Vermont and plan to retire here eventually. "If you look at it dispassionately, it's not a business that looks like it's ever going to make a significant amount of money," says Jones of the cheese-making operation. "But it's a great product."

As far back as the early 1800s, Vermont's dairy farms were turning milk into cheese, mainly cheddars of a kind first introduced from Britain during colonial times. But with the invention of refrigerated railroad cars in the late 19th century, Midwestern dairy facilities claimed most of the business. Crowley, one of the few Vermont cheese makers to survive, carved out a niche by producing Colby, a cheddar that is smoother and creamier than most.

Cheese-making staged a comeback in Vermont in the 1980s, as demand increased for artisanal foods produced by hand. The number of cheese makers in the state more than doubled—to at least 40—in the past decade. And the University of Vermont, in Burlington, has established an Artisan Cheese Institute. At Crowley's stone-and-wood frame, three-story factory, visitors can view the stages of production through a huge plate-glass window. On weekday mornings, 5,000 pounds of Holstein raw milk, chilled to 40 degrees, is pumped from refrigerated storage in the cellar to a double-walled, steam-heated metal vat, where it is cultured. About four hours later, the milk has been processed into solidified chunks, or curd. It is then rinsed, salted and shaped into wheels or blocks, ranging in weight from 2 1/2 to 40 pounds, before being pressed, dried, turned and moved into storage for aging.

The cheddar produced here comes in nine varieties, according to mildness or sharpness and the addition of pepper, sage, garlic, chives, olives or smoke flavor. While the largest Vermont cheese makers churn out 80,000 pounds daily, Crowley's takes a year to produce that much.

Ten miles or so northeast of Healdville lies Plymouth Notch, the Vermont village of white houses and weathered barns where President Calvin Coolidge spent his childhood. Preserved since 1948 as a state historic site, it remains one of Route 100's most notable destinations, attracting 25,000 visitors annually.

Writer **JONATHAN KANDELL** *lives in New York City. Photographer* **JESSICA SCRANTON** *is based in Boston.*

The village of Plymouth Notch (above) is little changed from 1872, when Calvin Coolidge (below: c. 1920 at the family farm) was born there; today it is a state historic site. "It was all a fine atmosphere in which to raise a boy," Coolidge would write in his 1929 memoir, evoking a world in which he "learned to drive oxen and used to plow with them alone when I was twelve years old."

The village, with its handful of inhabitants, has changed little since our 30th president was born here on July 4, 1872. His parents' cottage, attached to the post office and a general store owned by his father, John, is still shaded by towering maples, just as Coolidge described it in a 1929 memoir.

"It was all a fine atmosphere in which to raise a boy," Coolidge wrote. The autumn was spent laying in a supply of wood for the harsh winter. As April softened into spring, the maple-sugar labors began with the tapping of trees. "After that the fences had to be repaired where they had been broken down by the snow, the cattle turned out to pasture, and the spring planting done," recalled Coolidge. "I early learned to drive oxen and used to plow with them alone when I was twelve years old."

It was John Coolidge who woke his son—then the nation's vice president on vacation at home—late on the night of August 2, 1923, to tell him that President Warren G. Harding had suffered a fatal heart attack. John, a notary public, swore in his son as the new president. "In republics where the succession comes by election I do not know of any other case in history where a father has administered to his son the qualifying oath of office," the younger Coolidge would write later.

SOME 40 MILES NORTH of Plymouth Notch, Route 100 plunges down into its darkest, coldest stretch—the heavily wooded Granville Gulf Reservation. "Gulf" in this case refers to a geological process from more than 10,000 years ago, when mountaintop glaciers melted. The release of vast quantities of water gouged notches—or gulfs—into the mountains, creating a narrow chasm walled in by cliffs and forest. In 1927, Redfield Proctor Jr., who was governor from 1923 to 1925, donated most of the 1,171 acres of this six-mile ribbon of woodlands to the state, with prohibitions against hunting, fishing and commercial tree-cutting; the tract was to be "preserved forever."

The section of Route 100 that crosses Granville Gulf was not paved until 1965. Even today, few venture farther than a turnout overlooking Moss Glen Falls, spilling 30 feet over a 25-foot-wide rock face. "It's gorgeous—a real photo-op," says Lisa Thornton, a forester at the reserve. She's right.

Using a map originally drawn by a biologist more than 40 years ago, Thornton leads me toward a wedge of forest on the cliffs. We clamber up a hillside over spongy soil until we reach a stone ledge covered in moss and fern—and a stately stand of

BOTTOM: HULTON ARCHIVE / GETTY IMAGES

80-foot-tall hemlocks, perhaps 500 years old. The trees survived, Thornton says, because they were virtually inaccessible to Native Americans, European pioneers and timber companies. I'm reminded of Frost's poem "Into My Own":

One of my wishes is that those dark trees,
So old and firm they scarcely show the breeze,
Were not, as 'twere, the merest mask of gloom,
But stretched away unto the edge of doom.

For most of its length, Route 100 is paralleled by a 273-mile footpath that runs along the main ridge of the Green Mountains. Built between 1910 and 1930, the Long Trail preceded—and inspired—the Appalachian Trail, with which it merges for about 100 miles in southern Vermont. Created and maintained by the nonprofit Green Mountain Club, the trail offers 70 primitive shelters amid pine- and maple-forested peaks, picturesque ponds and alpine bogs. "Our volunteers maintain the shelters and keep clear 500-foot-wide corridors on either side of the trail—making sure there are no illegal incursions by timber companies," says Ben Rose, executive director of the organization.

SOME OF THE MOST NUMEROUS road signs along Route 100 warn of an ever-present danger: moose. The creatures wander onto the road in low-lying stretches, where tons of salt, spread during winter, wash down and concentrate in roadside bogs and culverts. "Moose are sodium-deficient coming out of their winter browse," says Cedric Alexander, a Vermont state wildlife biologist. "They have learned to feed in the spring and early summer at these roadside salt licks, which become very hazardous sections to drive through."

The danger has increased as the state's moose population has risen, from a mere 200 in 1980 to more than 4,000 today. Their prime predator is the four-wheeled variety. When an animal is struck by a car, the impact often sends the creature—an 800-pound cow or a 1,000-pound bull—through the windshield. At least one driver is killed and many more are injured every year.

The most frequent moose sightings in the state occur along a 15-mile segment of Route 105, a 35-mile continuation of Route 100, especially in early evening, May through July. On this particular night, game warden Mark Schichtle stops his vehicle on Route 105 and points to what he calls

In a remote mountain ravine, site of the 30-foot-high Moss Glen Falls (left), some stands of hemlock are 500 years old. Intact wilderness can also mean encountering a moose ambling onto a road (above: warning sign). "No matter how often it happens," says game warden Mark Schichtle, "you just don't expect to see an animal that large in the wild and so close by."

One of the most accessible—and geologically distinctive—points on the Long Trail is Smuggler's Notch, a nine-mile drive northwest from Stowe, the town best known for its ski resort, on Route 108, through the Green Mountains. Legend holds that its name dates back to the War of 1812. Trade with Canada, then still an English colony, had been suspended by the U.S. government; contraband goods were allegedly transported through this remote pass.

Huge boulders, some more than 20 feet tall, dot the landscape. "My grandfather used to bring me up here and we would climb past the boulders down to a beaver pond to go fishing," says my guide, Smith Edwards, 69, nicknamed "Old Ridge Runner" by his fellow Green Mountain Club members. (Edwards has trekked the entire length of the Long Trail four times.) He began hiking the trail as a Boy Scout in the 1950s. "Back then, they would drop off 13-year-old kids and pick us up three or four days later, up the trail 50 miles," says Edwards, who is retired from the Vermont highway department. "Of course, that wouldn't be done today."

We walk a good two hours on the Long Trail, ascending half-way up Smuggler's Notch, past birches, beeches and maples. Ferns, of which the state boasts more than 80 species, carpet the forest floor. "Here in the moist and shaded gorge they found a setting to their liking," wrote naturalist Edwin Way Teale in *Journey Into Summer* (1960), one volume in his classic accounts of travels across America. "moose skid marks"—black patches made by cars trying to avoid the animals. "Since January, there have been six moose killed just on this stretch," he says. We park a mile up the road, slather ourselves with mosquito repellent and begin a stakeout.

Within 15 minutes, a moose cow and her calf emerge from the woods and stand immobile on the road, 50 yards away from our vehicle, their dark hides rendering them virtually invisible in the darkness. But a moose-crossing sign alerts drivers, who brake to a halt. Soon, cars and trucks on both sides of the road are stopped; the two moose stare impassively at the headlights. Then, a bull moose—seven feet tall with a stunning rack of antlers—appears, wading in a roadside bog. "No matter how often it happens, you just don't expect to see an animal that large in the wild and so close by," says Schichtle.

With cars backing up, the warden turns on his siren and flashing lights. The moose scamper into the bog, and traffic resumes its flow, most of it headed toward New Hampshire. I'm reminded that Robert Frost himself, long a New Hampshire resident, was among the few outsiders wholly embraced by Vermonters. Perhaps that's because his Pulitzer Prize-winning poem, "New Hampshire," closes with an ironic twist:

At present I am living in Vermont.

The next day, as I head south on Route 100, bound for the heat and congestion of Manhattan, Frost's admission is one I would gladly make for myself.

Explore Vermont's culinary offerings at Smithsonian.com/vermont

YASUSHI AKIMOTO / AMANAIMAGES / CORBIS

DESTINATION ★ AMERICA

Garden of a Golden Age

Filoli—a lavish early 20th-century estate that is the last of its kind—harks back to when San Francisco's richest families built to dazzle

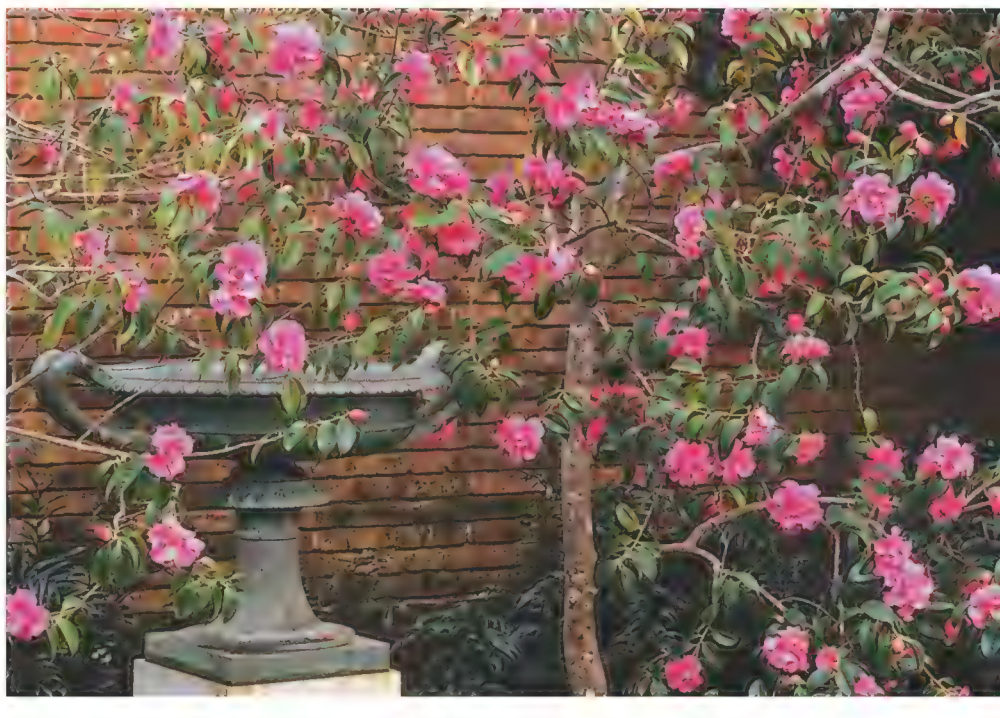
BY ANDREW PURVIS **Photographs by Saxon Holt**

British landscape designer Penelope Hobhouse calls Filoli (walkway to sundial) "the most beautiful formal garden in America." Here, said gold-mining heir William Bowers Bourn II, "I hope to grow young."

IN 1917, WILLIAM BOWERS BOURN II AND HIS wife, Agnes, stepped across the threshold of the Georgian manor he had built 30 miles south of San Francisco. Bourn, heir to California's Empire Mine gold fortune, had sited the estate on 654 acres and surrounded it with 16 acres of formal gardens. He called it Filoli, a name he came up with by combining elements of his life's credo: "*Fi*ght for a just case; *Lo*ve your fellow man; *Li*ve a good life."

Today a property of the National Trust for Historic Preservation, Filoli remains the sole intact estate from an era when San Francisco's wealthiest families created grand showplaces south of the city in the years after the 1906 earthquake. Bourn built for posterity. Filoli, he prophesied, could well prove to be "interesting a few hundred years from now." More than 100,000 visitors tour the property annually.

Although not widely known, Filoli possesses an extraordinary beauty that has earned it a curious footnote to popular culture: in the 1980s, as the credits rolled for "Dynasty," the prime-time weekly soap opera, an aerial view of Filoli represented the fictional, over-the-top Carrington family's ancestral seat. Filoli has also had cameos in many movies, including *Heaven Can Wait, The Joy Luck Club, The Wedding Planner* and *Rent*.



Filoli owes its painterly splendor (above: masses of lavender; below: a flowering camellia) to two visionary figures—William Bowers Bourn II (opposite below: at Filoli in 1917), who created the estate, and Lurline Matson Roth (opposite above: in 1932), who next purchased the property. Roth "was very conscious of color," says her daughter, Lurline Coonan. "She saw the garden as a tapestry."

P. 62 ROTH FAMILY PHOTOGRAPHS, FILOLI CENTER (TOP LEFT); MAP: PIETARI POSTI / DEBUT ART; SAN MATEO COUNTY HISTORY MUSEUM (BOTTOM LEFT)

Bourn saw Filoli as refuge. "My idea," he wrote in 1912, at age 55, is "to devote the afterglow of my life, this is the next 40 to 50 years or so, in personal supervision of its development." There, he told a friend, "I hope to grow young."

It was not to be. In 1922, just as the gardens had been completed, Bourn suffered a severe stroke and was confined to a wheelchair. Most mornings he would ask to be pushed to a point at the top of the garden that commanded a panoramic view of landscaped beds, pastureland and, in the distance, Crystal Springs Lake. Bourn died in 1936, at the age of 79. Agnes had preceded him in death six months earlier at age 75. Their daughter, Maud Bourn Vincent, had already succumbed, at age 45, to pneumonia, contracted during a transatlantic voyage from Europe to the United States. A son had died in infancy. The family is buried on the estate.

In 1937, Lurline Matson Roth, a San Francisco shipping heiress, and her husband, William, purchased Filoli for an undisclosed sum as a country retreat for her family—twin teenage daughters, Lurline and Berenice, and 21-year-old

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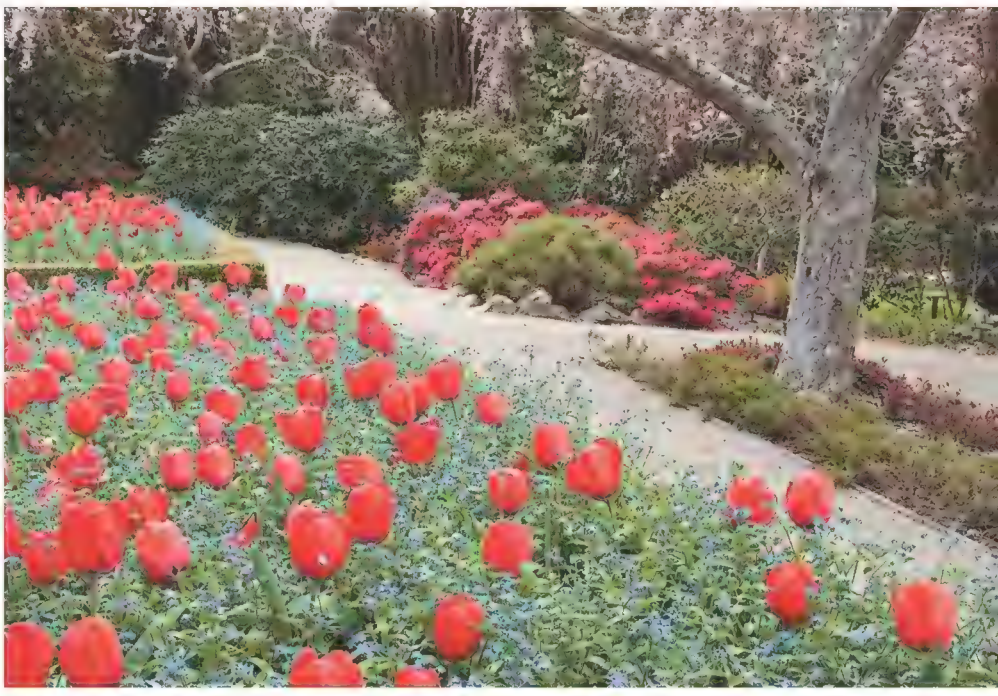
ANDREW PURVIS *is a John S. Knight fellow at Stanford University. Photographer* **SAXON HOLT***'s most recent book, with author John Greenlee, is* The American Meadow Garden.

son, William. (Today, all three still occasionally visit the garden.) Lurline Roth Coonan, 89, recalls her 1939 debutante ball at Filoli. "Everything was done in flowers," she says. "The house was all lit up. We had live music, jazz. It ended at 4 a.m. It was a *great* party."

For Roth, a self-taught horticulturist, preservation of the gardens and the introduction of new plants, particularly camellias, became a passion. "My mother was very conscious of color," Coonan recalls. "She saw the garden as a tapestry. She liked the pink of petunias, for example, and she just hated orange!" Although Roth employed 16 gardeners, she could often be seen deadheading the camellias or pruning roses.

After the death of her husband in 1963, Roth lived on alone at Filoli. In 1975, she donated the estate to the National Trust for Historic Preservation and established an endowment to maintain the gardens in perpetuity. Although she had by then moved to a smaller property near-



See more images of the gardens at Smithsonian.com/filoli

Showcasing its glories in all seasons, Filoli is based on successive blooms and features mature trees that provide focal points (clockwise from opposite top: Camperdown elm in winter; spring-flowering cherry and magnolia; swaths of tulips; preparation of beds for annual plants). According to Hadley Osborn, Filoli's former director, the gardens were designed to "act as gracious outdoor rooms."

by, she returned many weekends to wander the estate's brick walkways and leafy *allées* punctuated by rustic wooden benches. "She would bring sweet rolls to the gardeners and walk her dogs," says Coonan.

On a recent afternoon, Lucy Tolmach—Filoli's chief horticulturist for the past three decades—surveyed the many gardens, which are planted in everything from exotic Chinese tree peonies and European hornbeam trees to sturdy geraniums and old-fashioned roses. The grounds, she said, are "exquisite and elegant without being fussy" and the gardens "lend a measure of privacy and surprise."

Today, visitors can join Saturday morning guided tours on the estate's seven-mile network of nature trails that fan out across six native-California habitats—from redwood stands to grasslands. For those who prefer outdoor concerts to hiking, the 20th annual Jazz at Filoli series begins June 27. On Sunday afternoons through September 26, performers will take to Filoli's birch- and dogwood-shaded outdoor stage.

"The Bourns created Filoli—it was their vision," says collections curator Tom Rogers. "But the Roths supported it and passed it on. It was their act of holding on to things that made it all possible. They saw the future from the very beginning."

The Soul of Memphis

Despite setbacks, the Mississippi River city has held onto its rollicking blues joints, smokin' barbecue and welcoming, can-do spirit BY JAMIE KATZ

Photographs by Lucian Perkins

LOOK UP ALMOST ANYWHERE IN DOWNTOWN MEMPHIS, and you might spot a small white birdhouse perched atop a tall metal pole—a chalet here, a pagoda there. The little aviaries add a touch of whimsy to a town that has known its share of trouble. "People like them," says Henry Turley, the real estate developer who erected them. "I'm proud of those birdhouses."

Turley built them because he has concentrated his business efforts on the older, westernmost part of his hometown, near the Mississippi River—where mosquitoes are thought to swarm. That's no small matter in a city whose population was once devastated by yellow fever.

"People complained that it's impossible to live near the river because it breeds mosquitoes," Turley says in his elegant drawl.

A throbbing two-block entertainment district is all that is left of old Beale Street, most of which was razed in urban renewal schemes. Still, four million people visit annually.

"So I put up the birdhouses to attract purple martins, which are supposed to eat thousands of mosquitoes on the wing. But mosquitoes don't like flowing water. So it's *bullsh-t*." He savors this last word, even singing it slightly. "And it's bullsh-t about the purple martins killing them," he adds. "I'm fighting a myth with a myth."

A man of sly humor and earthy charm, the silvery-haired Turley, 69, joins a long line of colorful characters in local lore—from Gen. Andrew Jackson, who co-founded Memphis in 1819 on what was then known as the fourth Chickasaw bluff, to E. H. "Boss" Crump, the machine politician who ran the city for a good half-century, to W. C. Handy, B.B. King, Elvis Presley and a disproportionate number of other influential and beloved musicians. Turley is a sixth-generation Memphian descended from one of the Bluff City's earliest white settlers; his great-grandfather was a Confederate rifleman who later served in the U.S. Senate. Birdhouses aside, Henry Turley's stellar local reputation has more to do with what happened after the Rev. Dr. Martin Luther King Jr. was assassinated here in 1968.

That traumatic event and the ensuing riots accelerated an inner-city decay that fed on racial disharmony, tax-advantaged suburban development and the decline of Memphis' economic mainstays—especially King Cotton. Businesses and homeowners gravitated toward suburban havens to the east, such as Germantown and Collierville. But a hardy few, notably Turley and his oft-times partner Jack Belz, stood firm. And thanks to them and a few others, the city's heart has steadily regained its beat. Several Turley-Belz developments have earned acclaim, such as Harbor Town, the New Urbanist community on Mud Island, and South Bluffs, a cobblestoned enclave overlooking the Mississippi near the old Lorraine Motel, where King was shot. But closest to Turley's heart is a project called Uptown, which he undertook with Belz and the city government in 2002. They've built or renovated some 1,000 homes, fostered small businesses and carved out green spaces throughout a 100-block section that Turley says was probably the most degraded part of the city. And the new houses don't all look alike. "We're trying to make a nice neighborhood to live in, even if you happen to be poor," he says.

Turley denies that he has any grand visions as an urbanist. He's more like a blues guitarist who builds a solo gradually, from one chorus to the next. "We set out in a sort of dreamy Memphis way," he says. "And remember, Memphis has a lot of freedom, Memphis is a place of creativity. I mean a pretty profound freedom, where there aren't so many social pressures to behave a certain way. In Memphis you can do any goddamned crazy thing you want to do."

On a broiling summer afternoon, Turley took me for a spin in his BMW and told me about some of the other Memphis mavericks he has known, such as his late buddy Sam Phillips, the white record producer who recorded such black bluesmen as B.B. King and Howlin' Wolf and in 1952 founded Sun Records; his roster soon included Elvis, Johnny Cash, Jerry Lee Lewis, Carl Perkins and Roy Orbison. Then there is Fred W. Smith, the ex-Marine who created Federal Express, in 1971, and Kemmons Wilson, who came up with Holiday Inns, in 1952. Another local innovator, Clarence Saunders, opened the nation's first self-service grocery store in Memphis in 1916, featuring such novelties as shopping baskets, aisle displays and checkout lines. He named it Piggly Wiggly.

"There aren't so many social pressures to behave a certain way. In Memphis you can do **any goddamned crazy thing** you want to do."

We ended the day at Turley's South Bluffs home, tearing into some fried chicken with Henry's wife, Lynne, a musician and teacher. As the sun finally melted into the pristine Arkansas woodland across the river, we sank into some sofas to watch a PBS documentary co-directed by Memphis author and filmmaker Robert Gordon. Called "Respect Yourself: The Stax Records Story," it's about the Memphis label that, in the 1960s, rivaled Detroit's Motown for first-class soul music—think Otis Redding, Carla Thomas, Sam & Dave, Isaac Hayes, the Staple Singers, Booker T. and the MG's.

The tourist brochures tout Memphis as the home of the blues and the birthplace of rock 'n' roll, and there are musical shrines, including the original Sun Studios on Union Avenue and Elvis' monument, Graceland, plus two museums devoted to the city's musical heritage—the Rock 'n' Soul Museum (a Smithsonian Affiliate) and the Stax Museum of American Soul Music. Between them, they pay proper homage to the broad streams of influence—Delta blues, spirituals, bluegrass, gospel, hillbilly, Tin Pan Alley, Grand Ole Opry, rhythm & blues, jazz and pop—that converged in Memphis from the late 19th to the mid-20th centuries.

But the assumption that Memphis' glory lies entirely in the past doesn't sit well with some of the younger musicians. "There's a little bit of resentment that when people talk about Memphis, they only talk about the blues and Elvis," says Benjamin Meadows-Ingram, 31, a native Memphian and former executive editor at *Vibe* magazine. New music thrives in Memphis—a feisty indie rock scene and a bouncy, bass-driven urban sound that influenced much of Southern hip-hop. Independent record stores, such as Mid-

JAMIE KATZ *writes often on arts and culture. Pulitzer Prize-winning photographer* **LUCIAN PERKINS** *lives in Washington, D.C.*

MAP: PIETARI POSTI / DEBUT ART

town's Shangri-La and Goner Record, support Memphis artists. Local boy Justin Timberlake has conquered the international pop charts in recent years, and the Memphis rap group Three 6 Mafia won a 2006 Academy Award for the song "It's Hard Out Here for a Pimp," from the film *Hustle & Flow* (set in Memphis and directed by Memphian Craig Brewer). That gritty side of Memphis life doesn't make the visitor's guides.

BEFORE I WENT TO MEMPHIS, I visited Kenneth T. Jackson, 70, a proud native son of Memphis and an urban historian at Columbia University. He and his wife, Barbara, a former high-school English teacher, were college sweethearts at Memphis State (now the University of Memphis), and she keeps a Southern magnolia in their Chappaqua, New York, front yard as a reminder of home.

The couple has fond memories of the Memphis they knew in the 1950s, when Boss Crump himself might appear with his entourage at a Friday night football game, passing out candy bars to the cheerleaders. "He had this long white hair, and he'd wear a white hat and a white suit—he was so dapper," Barbara said. "It was as if the guardian angel of Memphis had come down to mix among the people."

The Jacksons also remember tuning in to a hopped-up deejay named Dewey Phillips (no relation to Sam), whose nightly WHBQ radio broadcast, "Red Hot & Blue," attracted a devoted following in both the white and African-American communities. It was Dewey Phillips who catapulted Elvis' career on the night of July 8, 1954, when he previewed Presley's debut single, "That's All Right (Mama)," playing it over and over until teenagers all around town were in a fever, then hauling the astonished young crooner out of a neighborhood movie theater to submit to his first interview ever. "Just don't say nothin' dirty," Phillips instructed him.

Though music people like Dewey and Sam Phillips were playing havoc with the color line, segregation was still the law of the land throughout Dixie. And race, Jackson maintains, is the inescapable starting point for understanding Memphis.

"There's a famous saying that the Mississippi Delta begins in the lobby of the Peabody Hotel and ends on Catfish Row in Vicksburg," he said. "It's a rich agricultural area, drained by the river, that's part of what is known as the Black Belt. Memphis grew up as a commercial entrepôt, a trading center for cotton, slaves, hardwood lumber and livestock—it was even the world's largest mule market, right into the 1950s. By the turn of the last century, Memphis had become the unofficial capital of both cotton culture and the Black Belt. Beale Street was arguably the cultural heart of the African-American world." Today, Memphis' population of

Beale Street looms large in the history of the region (below: blues busker Disco Felix carries on a street-performance tradition). By the early 1900s, as Memphis grew into the Mississippi Delta's unofficial capital, "Beale Street was arguably the cultural heart of the African-American world," says historian Kenneth T. Jackson.

More than 200,000 visitors make their way each year to the Lorraine Motel, now the site of the National Civil Rights Museum. A wreath marks the place where the Rev. Dr. Martin Luther King Jr. was standing when he was assassinated on April 4, 1968. The Lorraine, says museum curator Barbara Andrews, "is a very emotional place."

650,100 is 63 percent black. The nation's 19th largest city is also the eighth poorest, with the sad distinction of having the highest U.S. infant mortality rate—twice the average. Over the past half-century, Memphis has lost ground to Atlanta and other Southern cities, and it pains Jackson to talk about his hometown's self-inflicted wounds, political corruption and downtown neglect. But he hasn't given up. "I think cities can change," he said. "If New York can do it, why the hell can't Memphis?" At a time when many cities have lost their distinctive character, Jackson thinks the effort is worth it. "Memphis still has soul," he added.

I CLOSED MY EYES on the flight from New York, lulled by an all-Memphis iPod playlist heavy on underappreciated jazzmen such as Phineas Newborn Jr., George Coleman and Jimmie Lunceford. When the pilot announced our descent to Memphis International Airport, I flipped up the window shade to find column after column of fiercely billowing thunderheads. We shuddered through them into a vista of flat, lush farmland edging into suburban developments with curlicued street plans, then, near the airport, a series of immense truck terminals and warehouses. On the runway, I glimpsed the vast fleet of purple-tailed FedEx jets that help account for Memphis International's ranking as the world's busiest cargo airport.

After checking in to my hotel, I jumped aboard the Main Street trolley at the Union Avenue stop around the corner. Memphis trolleys are restored trams from cities as far-flung as Oporto, Portugal, and Melbourne, Australia, with brass fittings, antique lighting fixtures and hand-carved mahogany corbels. At every turn, our conductor pointed out highlights in a melodious accent that was hard to pin down. Louisiana Cajun, maybe? "No, sir, I'm from Kurdistan," allowed the conductor, Jafar Banion.

When we passed AutoZone Park, home of baseball's Triple-A Memphis Redbirds, Banion noted that the new downtown ballpark—the minor leagues' answer to Baltimore's Camden Yards—is earthquake-proof. It's a good thing, too, since Memphis lies at the southern end of the New Madrid seismic fault system; in 1812, a titanic quake temporarily caused a portion of the Mississippi to run backward. Soon we caught sight of the Pyramid—the 32-story stainless steel–clad arena on the banks of the Mississippi—a nod to Memphis' namesake (and sister city) on the Nile in Egypt. Though eclipsed as a sports and convention venue by the newer FedExForum, the Pyramid remains the most striking feature of the Memphis skyline. "Every time I see it, it reminds me of my uncle and his camels," Banion said, laughing.

The lower end of the trolley route swings through the South Main Arts District, which is dotted with lofts, galleries and eateries, among them the Arcade Restaurant, Memphis' oldest, where you can sip a malted in Elvis' favorite booth or relive a scene from Jim Jarmusch's 1989 film *Mystery Train*, some of which was shot there.

THE LORRAINE MOTEL is just a short walk from the Arcade and a half-mile south of Beale Street. In its day, it beckoned as

a clean, full-service establishment with decent food—one of the few lodgings in Memphis that welcomed African-Americans, Sarah Vaughan and Nat King Cole among them. Even after the Civil Rights Act of 1964 dismantled legal barriers, the Lorraine was that rare place where blacks and whites could mingle comfortably. In hot weather, a mixed group of musicians might drop in from recording sessions at Stax, which had no air conditioning, to cool off in the Lorraine swimming pool. Guitarist Steve Cropper—one of several white artists integral to the Stax sound—co-wrote "In the Midnight Hour" with Wilson Pickett just a few doors down from No. 306, the $13-a-night room where King customarily stayed.

Shortly after 6 p.m. on the evening of April 4, 1968, the civil rights leader stood outside that room, bantering with friends down in the parking lot. One of them was a respected Memphis saxophone player named Ben Branch, who was scheduled to perform at a mass rally that night. "Ben, make sure you play 'Precious Lord, Take My Hand' in the meeting tonight," King called out. "Play it real pretty." Those were his last words.

"Ben, make sure you play 'Precious Lord, Take My Hand' in the meeting tonight," King called out. "Play it real pretty." **Those were his last words.**

Barbara Andrews, 56, has been curator of the adjoining National Civil Rights Museum since 1992. "It is a very emotional place," she said of the Lorraine. "You see people crying, you see people sitting in silence." The exhibits trace the painful, determined journey from abolitionism and the Underground Railroad to the breakthroughs of the 1950s and '60s. You can board an early '50s-vintage city bus from Montgomery, Alabama, and sit up front near a life-size plaster statue of Rosa Parks, who famously refused to give her seat to a white man; every minute or so, a recording of the driver asks her to move to the back. ("No!" snapped Durand Hines, a teenager in town from St. Louis for a family reunion.) The museum's narrative moves on to Birmingham and Selma and Dr. King's work in Chicago and the Memphis sanitation workers' strike of 1968. As you approach the end—the carefully preserved motel rooms and the balcony itself—you hear a recording of Mahalia Jackson singing "Precious Lord" with a calm, irresistible power, just as she did at King's funeral: "Precious Lord, take my hand / Lead me on, let me stand."

Not everyone makes it all the way. Andrews recalls walking the late African-American Congresswoman Barbara Jordan through the museum. "Actually I was pushing her wheelchair—and she did pretty well through most of the exhibits. But by the time we had come around by Chicago—you could hear Mahalia singing—she asked that I turn back. She said she knew how this ends. It was just too much for her to bear."

ON APRIL 17, 1973, a Dassault Falcon jet took off from Memphis bearing the first Federal Express overnight delivery. That night, 14 Falcons carried 186 packages to 25 cities. The original plane is on display at the Smithsonian National Air and Space Museum's Udvar-Hazy Center.

Fred W. Smith had dreamed of creating such a service as an undergrad at Yale, where he was a flying buddy of John Kerry and a frat brother of George W. Bush. During two tours of duty in Vietnam, where Smith flew on more than 200 combat missions, he gained valuable exposure to complex logistical operations. It paid off. Today, Memphis-headquartered FedEx is a $33 billion company serving 220 countries and handling more than 7.5 million shipments daily. "Memphis without Fred Smith and FedEx is hard to conceive," says Henry Turley. "FedEx is the economic engine."

Memphis is also a major river port, rail freight center and trucking corridor, and a key distribution hub for Nike, Pfizer, Medtronic and other companies. At the cavernous FedEx SuperHub at Memphis International, where packages tumble along 300 miles of automated sorting lines, the noise level is deafening. Handlers wear earplugs, back belts and steel-toed shoes. The pace quickens after 11 p.m. "At night, we gang-tackle everything," said Steve Taylor, a manager of the SuperHub control room, who shepherded me around. "We're sorting 160,000 packages an hour."

With a payroll of more than 30,000, FedEx is by far Memphis' largest employer. Those jobs are a key to undoing the legacies of poverty and racial inequality, said Glenn D. Sessoms, 56, who was then managing daytime sorting operations at the SuperHub. "Think about it—there's probably about 2,000 or more African-Americans on my 3,500-person shift here," he said. "Well, a lot of them are managers, team leaders and ramp agents."

Sessoms, an African-American, came to Memphis in 1994 and became active with the National Civil Rights Museum and the United Way. "This is still fundamentally a racially divided city," he said. "But I think people are starting to figure out how can we live better together, support one another's agendas."

He pointed out his office window to the airport tarmac, where FedEx handlers were ferrying packages to a DC-10. "It's hard work out here," Sessoms said. "Especially when it's 98 degrees out, which means it's 110 down there. But people who work here have pride. They can say, 'I'm throwing packages out here in the heat, but I've got a good job with good benefits. I'm wearing a uniform.'" And they're the backbone of FedEx, he said. "I'm an executive vice president. If I don't come to work, we're OK. If *they* don't come to work, we're S.O.L."

"What's that?" I asked.

"Sh-t outta luck."

THERE ARE SAID TO BE SOME excellent high-end restaurants in Memphis. I never found out. I went for the barbecue. The Memphis variety is all about pork—ribs or shoulder meat, prepared "dry" (with a spicy rub) or "wet" (with a basted-on sauce).

Popular Memphis vocalist Ms. Nickki, accompanied by veteran sidemen Melvin Lee (left) and Chris Pitts (right), performs on weekend nights at Wild Bill's Blues Club. "My real taste of the blues came after I got to Memphis," she says. "Back home [in Holly Springs, Mississippi], we were church folks—gospel, gospel, gospel."

I'm still dreaming about some of the places where I pigged out. There's the much-celebrated Rendezvous, tucked away in a downtown passageway called Gen. Washburn Alley (named for a Union general who fled in his nightclothes during a Rebel cavalry raid in 1864). Then there's Payne's Bar-B-Q, a converted Exxon service station out on Lamar Avenue. Walk past the gumball machine into a large room with a salmon-colored cinder-block wall. Belly up to the counter and order a "chopped hot"—a pork shoulder sandwich on a soft bun with hot sauce and mustardy slaw. Crunchy on the outside, smoky tender inside. With a Diet Coke, it comes to $4.10—possibly the greatest culinary bargain in these United States. Payne's was opened in 1972 by the late Horton Payne, whose widow, Flora, carries on the tradition today. I asked her how business was going. "It's holding its own," she said. "Damn right!" thundered a customer nearing the counter. "Give me two just like his, all right, baby?" She flashed a smile and turned toward the kitchen.

But the heavyweight champ has to be Cozy Corner, at the intersection of North Parkway and Manassas Street. The sign over the front door is hand-lettered. The charcoal cooker is just inside. I ordered ribs. White bread makes a good napkin to sop up what happens next. My sauce-splattered notes from that foray consist of two words: the first is "Holy"; the second is unreadable. Smokes, maybe.

THE MIGHTY MISSISSIPPI has spawned triumph and tragedy, song and legend—and, as I learned one sultry afternoon, a great number of scary-looking catfish. The kind that weigh more than your mama. In *Life on the Mississippi*, Mark Twain tells of a catfish over six feet long, weighing 250 pounds. Who knows? Today some catfish competitions require anglers to strap on lie detectors to verify they didn't cheat, say, by submitting the same fish that won last time.

At the Bass Pro Shops Big Cat Quest Tournament, which I attended on Mud Island, actually a peninsula jutting into the Mississippi, the catch must be brought in live ("No catfish on ice," the rules state). This was all patiently explained to me by one of the judges, Wesley Robertson, from Jackson, Tennessee. "I'm a little-town guy," he said, glancing warily toward the Memphis skyline.

With a possible $75,000 in cash prizes at stake, a long line of river craft inched toward the official weigh-in, bristling with rods and nets. Robertson told me the world-record catfish was actually 124 pounds. The best bait? "Shad and skipjack," he said. The best catfishing? "James River, Virginia." The one he dreams about? "I'll take three dams on the Tennessee River. There's a world record in there." I observed that he wasn't being very specific. He shot me a sidelong grin that made me feel I just might be catching on.

TAD PIERSON, 58, A STRAW-HATTED blues aficionado originally from Kansas, is the Zen master of Memphis tour operators, a one-man Google of local knowledge. "I do anthro-tourism," he told me.

I rode shotgun in his creamy pink 1955 Cadillac for an afternoon ramble. We looped around to the juke joints near Thomas Street, which some people call "the real Beale

Street." The more interest you show, the more Pierson lights up. "I get a sense that people are called to Memphis," he said. "It's cool bringing them to the altar of experience."

The largest number of worshipers go to the slightly eerie theme park that is Graceland. Maybe I was just in a bad mood, but the whole Elvisland experience—the Heartbreak Hotel & RV Park, the "Elvis After Dark" exhibit, Elvis' private jet and so on—seemed to me a betrayal of what was most appealing about Elvis, *early* Elvis at any rate: his fresh, even innocent musical sincerity. There's an undercurrent of cultural tension there, with some visitors reverentially fawning over every scrap of Presleyana, while others snicker, secure in the knowledge that their home-decorating taste is more refined than that of a slick-coifed rocker born in a two-room shotgun shack in Mississippi at the height of the Depression—who, even posthumously, earns $55 million a year. Actually, the white-columned house and grounds he bought for himself and his extended family are quite pretty.

I was struck by the fact that Elvis' humble birthplace—there's a scale model of it at Graceland—was almost identical to W. C. Handy's Memphis home, which now houses the W. C. Handy Museum on Beale Street. The composer's first published work, 1912's "Memphis Blues," began as a jaunty campaign song for Boss Crump, and Handy eventually wrote many popular songs, including "St. Louis Blues" and "Beale Street Blues": "If Beale Street could talk, if Beale Street could talk / Married men would have to take their beds and walk."

Late one afternoon, hours before the street ginned up for real, I was leaning into the open-air bar window of B.B. King's Blues Club at Beale and South Second, checking out a singer named Z'Da, who's been called the Princess of Beale Street. A tall man with a white T-shirt and salt-and-pepper hair approached me, pulling on a cigarette. "I saw you taking pictures of W. C. Handy's house a little while ago," he said, smiling.

We got to talking. He told me his name was Geno Richardson and he did odd jobs for a living. "I bring water for the horses," he said, pointing over to one of the carriages that take tourists around the area. He had heard stories about Beale Street in its 1920s heyday, when prostitution and gambling flourished and George "Machine Gun" Kelly was a small-time bootlegger here. Talented bluesmen could always find work, but it wasn't a place for the faint of heart. In the '50s, "Elvis was about the only white guy who could come here after dark," Richardson said. "And that was because B.B. King, Howlin' Wolf and those guys sort of took him under their wing."

Today's throbbing two-block entertainment district is well-patrolled by Memphis police; it's all that's left of the old Beale Street, which stretched eastward with shops, churches and professional offices before they were razed in misbegotten urban renew-

Blues aficionado Tad Pierson (below) conducts tours of Memphis in his pink 1955 Cadillac. Originally from Kansas, Pierson moved here in 1995 and thrives on introducing out-of-towners to his adopted city. "I get a sense that people are called to Memphis," he says. "It's cool bringing them to the altar of experience."

al schemes. Across the intersection from the Handy museum, in the basement of the First Baptist Beale Street Church, the famed civil rights advocate and feminist Ida B. Wells edited her newspaper, *Free Speech*. In 1892, after the lynching of three black grocery store owners—friends of hers who had been targeted for taking business away from whites—Wells urged blacks to pack up and leave Memphis; a mob then ransacked the paper's office and Wells fled the city herself. Seven years later, on an expanse of land adjoining the same house of worship, Robert R. Church Sr., a former slave who became the South's first black millionaire, created Church Park and Auditorium—the city's first such amenities for African-Americans—and later hired W. C. Handy to lead the park's orchestra. Booker T. Washington spoke there, and President Theodore Roosevelt drew throngs to this now-forgotten patch of turf.

Richardson, 54, asked me where I was from, and when I said New York, he touched the Yankees logo on his baseball cap and smiled again. Then he handed me a copy of the weekly *Memphis Flyer*, opened to the music listings. "This has everything you need," he said. I gave him $5 and we wished each other well.

"I knew a guy who once said to me, 'You know, Memphis is one of the few real places in America. **Everything else is just a shopping center.'"**

THROUGH HIS FILMS and writings—which include a biography of Muddy Waters and *It Came From Memphis*, a captivating study of the Bluff City's racial and musical gestalt during the pivotal Sun-to-Stax era—Robert Gordon, 49, has become a beacon of Memphis culture.

I met Gordon for lunch one day at Willie Moore's soul food place on South Third Street, which, he pointed out, is the continuation of Highway 61, the fabled blues road that slices through the Mississippi Delta from New Orleans to Memphis. "All roads in the Delta lead to 61, and 61 leads to Memphis," Gordon said. "The way the moon creates tidal flows, the Delta creates social patterns in Memphis."

We drove around Soulsville, USA, the predominantly black section where Aretha Franklin and several other important music figures came from. Gordon turned down South Lauderdale to show me the studios of Hi Records, the label best known for recording Al Green, who still performs. The street has been renamed Willie Mitchell Boulevard, after the late musician and producer who was to Hi Records what Sam Phillips was to Sun. There's common ground there, Gordon suggested. "I think that what runs through much of the stuff in Memphis that has become famed elsewhere is a sense of individuality and of independence, establishing an aesthetic without being concerned about what national or popular trends are," Gordon said.

Just a few blocks farther along we approached the Stax Museum and the adjoining Stax Music Academy, where teenagers enjoy first-class facilities and instruction. I met some of the students and teachers the next evening; it's impossible not to be moved by the spirit of optimism they embody and their proud (but also fun-loving) manner. The hope is that the new Stax complex, which opened in 2002, will anchor a turnaround in this historically impoverished community.

"I like the whole message of what's happened to Delta culture, that it's gained respect," Gordon said. "It didn't yield to pressures, it maintained its own identity, and ultimately, the world came to it, instead of it going to the world. And I feel like you can read that in the buildings and streets and history and people and happenstance exchanges—all of that."

"PUT YOUR HANDS TOGETHER for Ms. Nickki, all the way from Holly Springs, Mississippi!" the emcee yelled to a packed house. It was Saturday night at Wild Bill's, a juke joint wedged next to a grocery store on Vollintine Avenue. The drummer was laying down a heavy backbeat, accompanied by a fat bass line. Wild Bill's house band, the Memphis Soul Survivors, includes sidemen who have backed B.B. King, Al Green—everybody—and the groove is irresistible. Then Ms. Nickki, a big-voiced singer with charm to spare, stepped to the mike.

As it happened, the club's founder, "Wild Bill" Storey, had died earlier that week and had been laid to rest at the veterans' cemetery in Germantown just the day before. "I almost didn't come. I cried my eyes out," Ms. Nickki said tenderly.

They say there are two very good times to sing the blues—when you're feeling bad, and when you're feeling good. Sometimes they overlap, like the sacred and the profane. So Ms. Nickki decided to show up. "Y'all came to the best dog-gone blues joint this side of the moon!" she declared, reaching deep and belting out one impassioned verse after another in Wild Bill's honor. She turned up the heat with a B.B. King blues: "Rock me baby, rock me all night long / I want you to rock me—like my back ain't got no bone."

Wild Bill's is a long narrow space with red walls and ceiling fans and a tiny bar and kitchen in the back. People were drinking 40-ounce beers in plastic cups at communal tables, laughing and carrying on, black and white, all ages. Fourteen dancers crammed into a space big enough for eight, right up where the band was playing. From a corner table in the back, under a bulletin board festooned with hundreds of snapshots, three smartly dressed young women spontaneously launched into a backup vocal riff borrowed from an old Ray Charles hit—"Night 'n' day . . . [two beats] . . . Night 'n' day"—spurring on both the band and the dancers. The Raelettes would have been proud.

"Anyone here from the Show-Me State?" Ms. Nickki asked the crowd between songs. A 40-ish woman in a low-cut dress raised her hand.

"You look like a *show-me* girl!" Ms. Nickki said, to raucous laughter. Then she piped up: "I was born in Missouri, 'cross the line from Arkansas / Didn't have no

Tour Memphis from the back of a 1955 Cadillac at Smithsonian.com/memphis

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money, so I got in trouble with the law."

Actually, Ms. Nickki was born in 1972 in Holly Springs, Mississippi, like the emcee had said. Nicole Whitlock is her real name, and she didn't even like the blues when she was growing up. "My real taste of the blues came after I got to Memphis," she told me. "Back home, we were church folks—gospel, gospel, gospel."

HENRY TURLEY'S OFFICE is in the historic Cotton Exchange Building at Union Avenue and Front Street, once known as Cotton Row. Turley told me a high percentage of the nation's cotton trading still takes place in Memphis, and the traders have the same damn-the-torpedoes attitude that gave Memphis so much of its character through the years.

"They're wild and free, and they do what the hell they want to do," Turley said. "A lot of these cotton guys, they're mad gamblers, you know, betting on cotton futures with money they never dreamed they had, leveraging things at a huge multiple."

Turley describes himself and his approach to real estate development in more modest terms. "I have small ideas," he said. "I tend to think those are better ideas, and I tend to think that they become large ideas if they're replicated in discrete and different ways, sufficiently. My small idea is to create neighborhoods where life is better, and richer, and more interesting and just more fulfilling for the people who choose to live there."

Turley seems to know everybody in Memphis—from the mayor to the musicians and the street people. It's impossible to drive around with him without stopping every block or so for another friendly exchange.

"Hey, you're lookin' good, man," he called out to a young black homeowner in Uptown who'd been ailing the last time they spoke. Within the next five minutes, they swapped spider-bite remedies, Turley dispensed some real estate advice, and the man passed on a suggestion about putting more trash cans in the neighborhood.

"I knew a guy who once said to me, 'You know, Memphis is one of the few real places in America,'" Turley said. "'Everything else is just a shopping center.' He's right. Memphis is a real place."

He pulled up in a pleasant new square hacked out of an abandoned lot and pointed out the window. "Look at that!" I poked my head out and peered up to see a miniature, octagon-shaped white house perched on a tall metal pole.

"Looks like a birdhouse to me," Turley said, savoring the word, even singing it slightly.

Real estate developer Henry Turley (below: at Miss Cordelia's, a small grocery in Harbor Town, the residential enclave Turley built with business partner Jack Belz) extols the city's liberality. "We set out in a sort of dreamy Memphis way," he says. "And remember Memphis has a lot of freedom. Memphis is a place of creativity."

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MARK TWAIN IN LOVE

A chance encounter on a New Orleans dock in 1858 haunted the writer to his dying day 100 years ago

BY RON POWERS

Illustration by Jody Hewgill

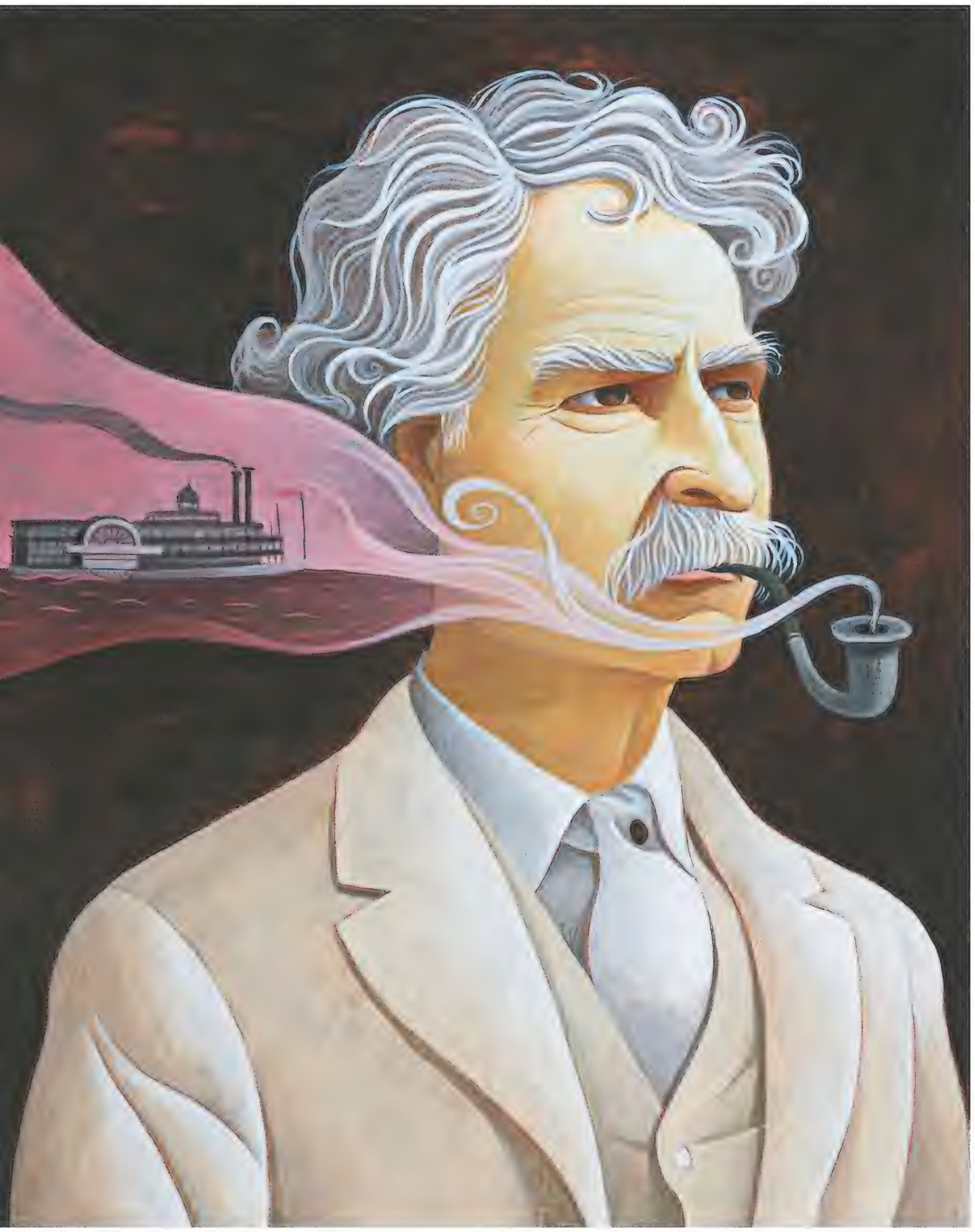
After Mark Twain first glimpsed the girl of his dreams, he never forgot Laura Wright's "frank and simple and winsome" charms.

ON AN EMPYREAL SPRING EVENING in 1858, with the oleander in bloom upriver and early jasmine scenting the wind, the steersman for the Mississippi steamboat *Pennsylvania*, a bookish 22-year-old named Sam Clemens, guided the massive packet into the docks under the winking gaslights of New Orleans. As the *Pennsylvania* berthed, Clemens glanced to his side and recognized the adjacent craft, the *John J. Roe*.

Perhaps recalling his many happy assignments steering the *Roe*, the young apprentice pilot leapt spontaneously onto the freighter's deck. He was amiably shaking the hands of his former mates when he froze, transfixed by the sight of a slight figure in a white frock and braids: a girl not yet on the cusp of womanhood who would forever after haunt his dreams and shape his literature.

Mark Twain's description, written years later, of the girl as she emerged from the jumble of deckhands, leaves no doubt as to the spell she cast on him. "Now, out of their midst, floating upon my enchanted vision, came that slip of a girl of whom I have spoken . . . a frank and simple and winsome child who had never been away from home in her life before." She had, the author continued, "brought with her to these distant regions the freshness and the fragrance of her own prairies."

The winsome child's name was Laura Wright. She was only 14, perhaps not quite, on that antebellum May evening, enjoying a river excursion in the care of her uncle,



William C. Youngblood, who sometimes piloted the *Roe*. Her family hailed from Warsaw, Missouri, an inland hamlet some 200 miles west of St. Louis.

She surely could never have imagined the import of that excursion. In this centenary year of Mark Twain's death, it may seem that literary detectives have long since ransacked nearly every aspect of his life and works. Yet Laura Wright remains among the final enigmas associated with him. Only one faded photograph of her is known to exist. All but a few fragmentary episodes of her own long life remain unchronicled. Mark Twain's references to her are, for the most part, cryptic and tinged with mysticism. Their encounter in New Orleans spanned but parts of three days; they met only once after that, in a brief and thwarted courting call that Sam paid two years later in 1860.

For the romantic and impetuous Mark Twain (c. 1859, about age 23), the instant when Laura came "floating upon my enchanted vision" was a moment seared into memory.

Yet in a powerful, psychic sense, they never parted. In 1898, Mark Twain, at the time living in Vienna with his wife, Olivia Langdon Clemens (Livy), and daughters Susy, Clara and Jean, finally unburdened himself of Laura Wright's impact on him. In a lengthy essay entitled "My Platonic Sweetheart," published posthumously in 1912, he described a protracted and obsessive recurring dream. A young woman appeared, with differing features and names, but always under the guise of the same benevolent, adoring persona. Mark Twain and the mysterious apparition floated hand in hand over cities and continents, spoke a language known only to themselves ("*Rax oha tal*"), and comforted each other with a love more rarefied than between brother and sister, yet not specifically erotic. Mark Twain did not supply the specter's real-life name, but scholar Howard Baetzhold has pieced together overwhelming evidence that the figure in the dream is Laura.

The Platonic Sweetheart gazes out at us today, Mona Lisa-like, from her repose inside the fecund dream world of the man who redefined American literature. But how significant was Laura Wright's influence on Mark Twain, both as an object of affection and as a muse? Mark Twain took the answers to these questions with him when he joined the arc of Halley's comet at Redding, Connecticut, on April 21, 1910. Yet Baetzhold's investigations—not to mention Mark Twain's own writings—have generated powerful evidence that the effect of this nearly forgotten figure was profound.

Certainly Mark Twain's obsession arose instantaneously. In his posthumously published *Autobiography* he recalled losing no time declaring the young girl to be his "instantly elected sweetheart" and hovering no more than four inches from her elbow ("during our waking hours," the *Autobiography* primly stipulated) for the ensuing three days. Perhaps he escorted her along the colorful French market or danced the schottische on the deck of the *Roe*. The two talked and talked, their conversations drifting unrecorded into the ether.

Never mind her tender years and provincial origins; something about Laura Wright seared itself into Sam's soul. "I could see her with perfect distinctness in the unfaded bloom of her youth," Mark Twain went on in his *Autobiography*, "with her plaited tails dangling from her young head and her white summer frock puffing about in the wind of that ancient Mississippi time."

SAM AND LAURA WERE obliged to part when the *Pennsylvania* backed out of the docks for its upriver voyage. Laura had given him a gold ring, Mark Twain would many years later confide to his secretary, Isabel Lyon. Only three weeks later, a catastrophe occurred, as traumatic to Sam as meeting Laura had been rhapsodic. This tragedy may have forged his need to take recourse from grief in fantasies of a healing angel. On the morning of Sunday, June 13, the *Pennsylvania* exploded, with tremendous loss of life. Sam was not aboard, but his younger brother, Henry, was—serving as a "mud clerk," or boy who would go ashore, often at a mud bank, to receive or hand off freight. Sam had secured the position for his brother as a gift, hoping to offer the shy boy an exposure to Sam's own world of riverboat adventure. It took the badly burned Henry a week to die in a makeshift Memphis hospital. Sam reached his brother and witnessed the end. The guilt-ridden letter in which he announced the news to the Clemens family amounts to a scream of primal anguish. "Long before this reaches you," it began, "my poor Henry—my darling, my pride, my glory, my *all*, will have finished his blameless career, and the light of my life will have gone out in utter darkness. O, God! this is hard to bear."

> Mark Twain recalled losing no time declaring the young girl to be his "instantly elected sweetheart."

As Sam mourned his brother, Laura Wright remained fixed in Sam's memory. He wrote letters to her, which she answered; in 1860 or so, he traveled to the family home in Warsaw to court her. Laura's mother, no doubt suspicious of the

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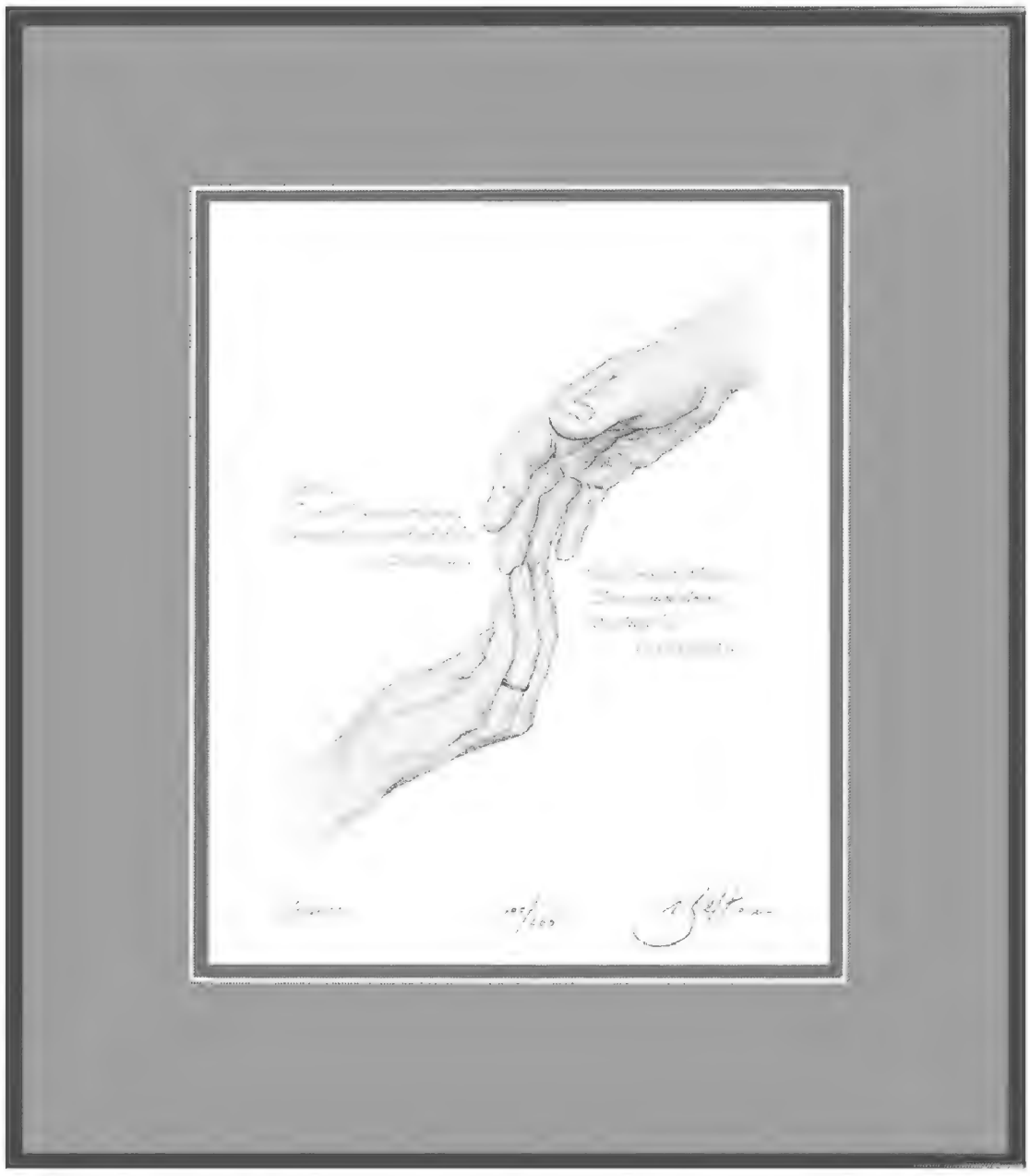

The poem reads: *"This I will remember,*
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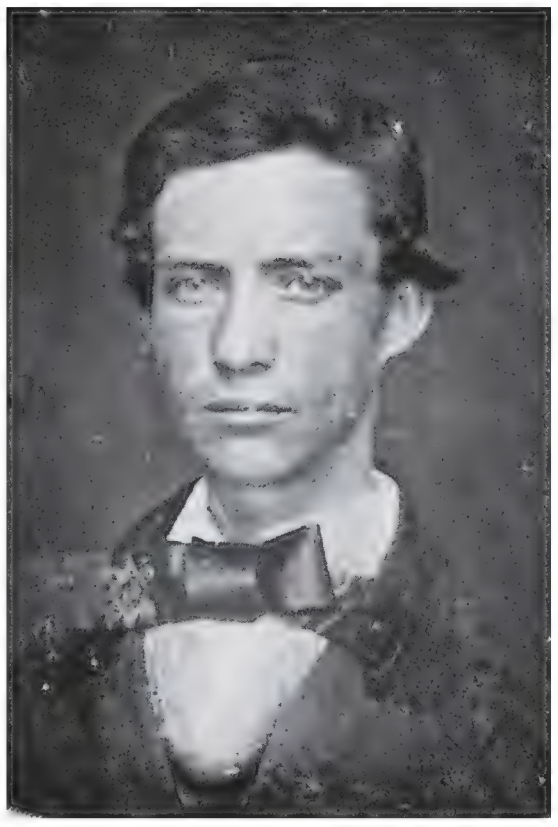
24-year-old riverman's intentions toward her 16-year-old darling, may have pried into some of those letters—although years later, an aging Laura denied this to Mark Twain's first biographer, Albert Bigelow Paine. At any rate, Mrs. Wright treated Sam with hostility; he soon stormed off in a fit of his famous temper. "The young lady has been beaten by the old one," he wrote to his older brother Orion, "through the romantic agency of intercepted letters, and the girl still thinks *I* was in fault—and always will, I reckon."

After he departed Warsaw, Clemens went so far as to consult a fortuneteller in New Orleans, one Madame Caprell, from whom he sought the lowdown on his prospects for rekindling the romance. (Clemens may have had his doubts about the existence of God, but he was a pushover for the paranormal.) Mme. Caprell "saw" Laura as "not remarkably pretty, but very intelligent . . . 5 feet 3 inches—is slender—dark-brown hair and eyes," a description that Clemens did not refute. "Drat the woman, she *did* tell the truth," he complained to his brother Orion in an 1861 letter, after telling him that the medium had placed all blame on the mother. "But she said *I* would speak to Miss Laura first—and I'll stake my last shirt on it, she missed it there."

Thus it was Sam's stubbornness that foreclosed any further encounter with Laura Wright. Yet they did meet, time and again, over the years, in Clemens' dreams. And dreams, Samuel Clemens came to believe, were as real as anything in the waking world.

It is impossible to know when the Laura visitations commenced, but mention of them is strewn across the decades of Mark Twain's writing. He thought of "Miss Laura" when he went to bed at night, he had admitted to Orion in that 1861 letter. At some point the thoughts morphed into nocturnal visions. "Saw L. Mark Write in a dream . . . said good bye and shook hands," he wrote in his notebook in February 1865 from California, carefully altering her true name, as he always did. Mark Twain had already somehow discovered that the "instantly



The encounter with Laura was eclipsed by tragedy when Mark Twain's younger brother, Henry (above), died at age 19 in a riverboat explosion on June 21, 1858. "The light of my life," Twain lamented, has "gone out in utter darkness."

elected sweetheart" had elected someone else. "What has become of that girl of mine that got married?" he wrote in a letter to his mother, Jane Clemens, in September of 1864. "I mean Laura Wright."

This was the period of Sam Clemens' wild self-exile in the West, to which he had repaired with Orion to escape the Civil War. His robust drinking, alternating moods of risk-taking, pugnacity and black despair (he wrote later of placing a pistol barrel to his head but not squeezing the trigger), his crude practical jokes and his pose of flamboyance ("I am the most conceited ass in the Territory") pointed to demons as disturbing as the prospect of death on the battlefield. Sorrow and guilt over Henry's fate ravaged him—Mark Twain revisited the tragedy many times in his writing. As his letter to Jane Clemens shows, Laura weighed on his mind as well.

The corporal Laura weighed, that is. In her dream version, she had the opposite effect. The Platonic Sweetheart was weightless, serene: angelic, in fact—a healing angel to the troubled sleeper. "I put my arm around her waist and drew her close to me, for I loved her . . . my behavior seemed quite natural and right," Mark

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For the rest of Mark Twain's life, Laura Wright (in 1861, c. age 16) became the central figure in a recurrent dream: "I put my arm around her waist and drew her close to me, for I loved her," he wrote.

Twain wrote in "My Platonic Sweetheart" of an early dream encounter. "She showed no surprise, no distress, no displeasure, but put an arm around my waist, and turned up her face to mine with a happy welcome in it, and when I bent down to kiss her she received the kiss as if she was expecting it." Mark Twain continued: "The affection which I felt for her and which she manifestly felt for me was a quite simple fact; but. . . . It was not the affection of brother and sister—it was closer than that . . . and it was not the love of sweethearts, for there was no fire in it. It was somewhere between the two, and was finer than either, and more exquisite, more profoundly contenting."

It is possible that the dream-Laura might have counterweighted the demons that roiled in Mark Twain's legendary "dark side," as he called it, out West, tempering their self-destructive power over him, even as their fury ignited his creative fires. It was in the West, after all, that the "jackleg" (or self-improvised) journalist Mark Twain—he took the pseudonym in 1863—fully surrendered to the writing life and began to perfect the hot, lean, auda-

---

RON POWERS *is the author of* Mark Twain: A Life, *and* Sam and Laura, *a play about Twain and his lost love. Illustrator* **JODY HEWGILL** *teaches at the Ontario College of Art and Design in Toronto.*

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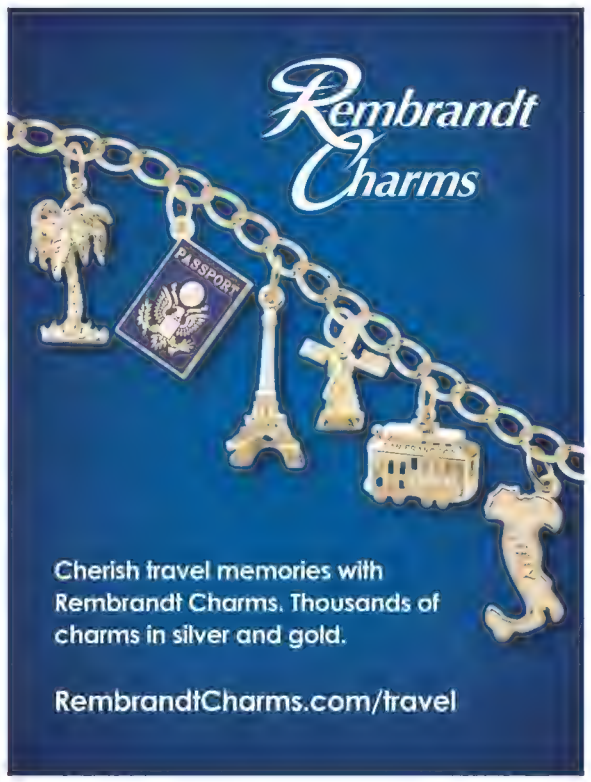
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And Becky comes strikingly close to that winsome child "with her plaited tails dangling from her young head and her white summer frock. . . ."

cious, shockingly irreverent "voice" that would soon liberate American letters from the ornate pieties of the Boston Brahmins and, behind them, Old Europe. His editor at the Virginia City (Nevada) *Territorial Enterprise*, Joe Goodman, declared in 1900 that Mark Twain wrote some of the best material of his life—most of it alas, lost—during those Western years. "I was . . . fighting off lawsuits continuously," Goodman recalled. "Nevertheless I stayed with Sam and never so much as cut a line out of his copy."

A LAURA-LIKE APPARITION visited Clemens' dreams at intervals throughout the rest of his life. He alluded to their fleeting waterfront romance in his notebooks and in his *Autobiography*. Baetzhold believes that Laura was the model for Becky Thatcher in *The Adventures of Tom Sawyer*, for Laura Hawkins in *The Gilded Age*, for Puss Flanagan in *A Connecticut Yankee in King Arthur's Court* and even for Eve in "Eve's Diary," a comical short story based on the biblical creation myth. Except for Becky, these figures are among the most vibrant and autonomous female characters created by a writer often criticized for his one-dimensional, desexualized women. And Becky, that "lovely little blue-eyed creature with yellow hair plaited into two long tails, white summer frock and embroidered pantalettes," comes strikingly close to that winsome child "with her plaited tails dangling from

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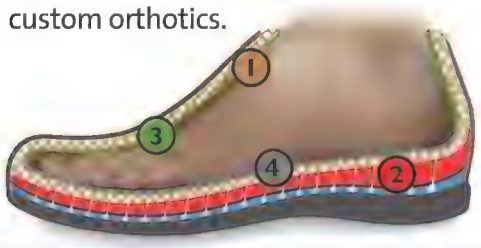

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Details of Laura's life after New Orleans are sparse, but they suggest a woman of exceptional grit and resilience—and bad luck.

her young head and her white summer frock puffing about in the wind."

Finally, in 1898, Mark Twain addressed Laura Wright straight on in all her dimensions, although not by name. "My Platonic Sweetheart" chronicled her appearances in dreams over the years. The essay was not published in *Harper's* magazine until two and a half years after Mark Twain's death.

BUT WHAT OF Laura Wright herself?

Details of her life after New Orleans are sparse, but they suggest a woman of exceptional grit and resilience—and bad luck. Mark Twain wrote in his *Autobiography* of a letter from Laura, detailing her own crisis as she traveled upriver in May 1858. The *Roe* hit a snag and took on water; its passengers were evacuated, but Laura insisted to the captain that she would not leave her cabin until she had finished sewing a rip in her hoop skirt. (She calmly completed her task and only then joined the evacuees.) Shortly after that misadventure, according to a family friend, C. O. Byrd, she signed on as a Confederate spy and ended up with a price on her head. During the Civil War, she married a river pilot named Charles Dake, perhaps to escape the dangers of life as an espionage agent. She and her new husband headed west.

In San Francisco, Laura opened a school for "young ladies" and attained some sophistication. A tantalizing question is whether Laura was in the audience at Maguire's Academy of Music in San Francisco on the night of October 2, 1866.

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She moved to Dallas and became a public-school teacher. In March 1880, the 44-year-old Sam Clemens (by then happily married to Livy—whom he had wed in February 1870) opened a letter sent to his residence in Hartford, Connecticut, by a 12-year-old Dallas schoolboy with the wonderful name Wattie Bowser. Wattie asked the great man to answer biographical questions for a school essay, then added a stunning postscript:

"O! I forgot to tell you that our principal used to know you, when you were a little boy and she was a little girl, but I expect you have forgotten her, it was so long ago." The principal's name was Laura Dake—nee Wright. Writing to Laura through Wattie, Clemens sent back a torrential series of letters, filled with lyrical allusions to his youth and assuring Wattie/Laura, "No, I have not forgotten your principal at all. She was a very little girl, with a very large spirit . . . an unusual girl."

One of the last known communication between Clemens and Laura occurred 26 years later. Laura, then 62, was teaching at poverty-level wages. Even so, she was trying to help a young man—perhaps he had been one of her students—who needed money to attend medical school. She asked her former

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suitor to intercede for her with the philanthropist Andrew Carnegie. Clemens recognized the thinly disguised plea for help and sent her a check for one thousand dollars. She sent a letter of thanks. A few additional letters were exchanged the following year.

LAURA RE-EMERGES one final time, some 15 years after Mark Twain's death. According to a letter written in 1964 to scholar Charles H. Gold by C. O. Byrd, whose father had known the Wright family, Byrd spent an evening with Laura in—of all places—a Hollywood nightclub on the occasion of her 80th birthday. The two became friends. Sometime later, at Laura's shabby apartment, Byrd encountered an astounding literary treasure.

"On one of my visits we happened to be talking about Mark Twain," Byrd wrote to Gold. "She took me to her bed room, had me open her trunk, and got out several packages of letters from Sam Clemens. For several hours she read me portions of many of the letters. I think Lippincotts [the publishing company, J. B. Lippincott & Co.] offered her $20,000.00. I know that some of the letters were written during the [Civil] war."

Laura Wright Dake told Byrd that her sisters and brother had urged her to sell the letters, but this was not her wish. "She made me promise, on my honor, that after her death I would destroy the letters and not let anyone read them. She said Sam Clemens wrote them to her and for her and that they were not to be published." C. O. Byrd was one of those vanishing oddities of the 20th century, a man of his word. In his 1964 letter he blandly informed Gold, "I destryed [sic] the letters and followed all her instructions after her death."

Laura died in 1932, around age 87, on the eve of the Franklin D. Roosevelt administration. Beyond her conversations with C. O. Byrd and her siblings, she never divulged information about her flirtation with Sam Clemens or her correspondence with Mark Twain.

Perhaps there was more to tell than rational scholarship could conceive, as Mark Twain would write at the conclusion of "My Platonic Sweetheart": "In our

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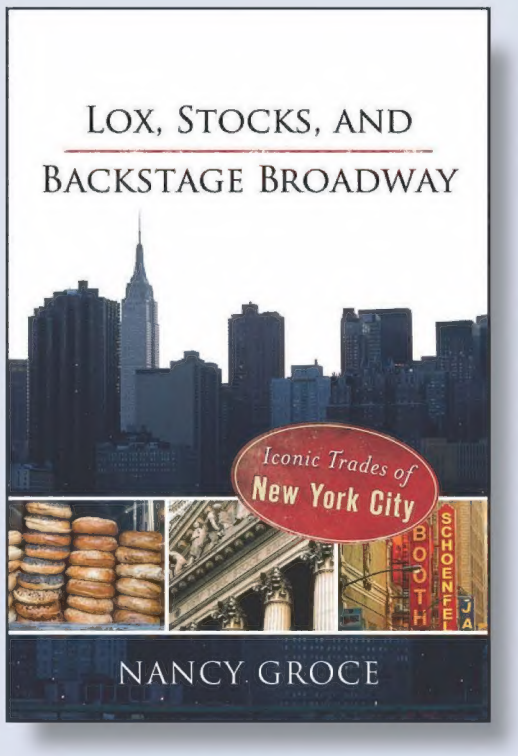

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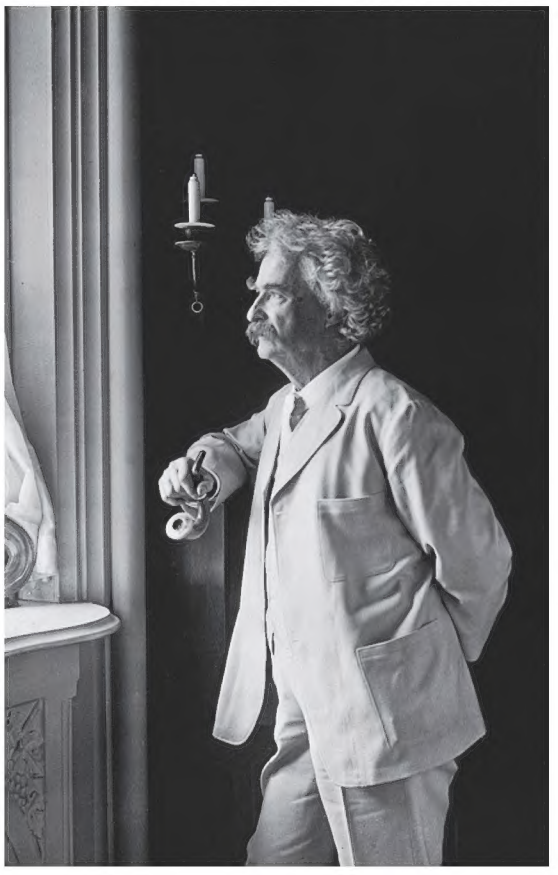

For Mark Twain (in 1907, age 71), who believed that our dreams are populated by "living spirits," Laura's apparitions seemed to signify a supernatural reality.

dreams—I know it!—we do make the journeys we seem to make: we do see the things we seem to see; the people, the horses, the cats, the dogs, the birds, the whales, are real, not chimeras; they are living spirits, not shadows; and they are immortal and indestructible. . . . We know this because there are no such things here, and they must be there, because there is no other place."

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Will Work for Brain Scans

Your dream job—part-time zombie? candle consultant?—is only a click away **BY RICHARD CONNIFF**

YOU KNOW THOSE DAYS when your income no longer quite equals your outgo? Or when a friend suddenly discovers that Bangalore is not a party treat, but the new home in southern India of what used to be his career? That's when I turn for comfort to the offerings on Internet job sites like Craigslist.

Naturally I skip past all the practical stuff. I know I would be a truly fine database administrator and an important addition to the team at (INSERT YOUR COMPANY NAME HERE), once I find out what a database is. But I don't sense much magic there. Likewise, the many splendid career opportunities in health care administration fail to appeal because, to be honest, I don't like being around sick people. (Oh, wait, that's a prerequisite.)

What interests me are the unusual jobs, with the potential to tap my tremendous, though so far wonderfully disguised, career potential. And while classified ads in the newspaper are mostly limited to local opportunities ("grease cleaner, must be team player"), Craigslist lets me go global. Thus I spent much of one recent departmental meeting trying to decide, with the help of my iPhone, whether I should become a caretaker for a Buddhist monastery on the coast of New Zealand ("Perfect for a service-oriented person interested in self-development, peace and wisdom") or a pub-crawl promoter in Prague where the Zen seemed to be mostly about finding the sweet spot between strolling and staggering. I applied to become a Zakelijke Uitdaging in Amsterdam, basically because it sounded so cool. Then I found out that it actually means "business challenge" in Dutch, and since my colleagues assure me that I am already a business challenge, this would be a lateral move.

Apart from language issues, it's important to keep a few caveats in mind: any job advertised as "high class" usually requires you to get naked, or cheat grandmothers—possibly both at the same time. Also beware that many Internet job offerings make no sense, like the one seeking "hard-working college students" or another headlined "Rock Stars Wanted!" followed by the words "must pass drug screening." (But, dude, the job is, like, the next best thing to groupies. You sit in a cubicle, phone up total strangers and ask if "they want to lower their phone, cable and Internet utility bills!")

Compensation may be a problem. I was briefly excited by the possibility of earning $50 an hour as a "candle consultant," but the phrase "earn free candles!!!!" set off alarm bells. Another ad offering "Intern Position at Organic Farm" promised "$200 at the end of 120 hours," translation: "Indentured Servant Wanted for Stoop Labor (other leafy greens negotiable)." An ad seeking parents of suicidal teenagers for a scientific study offered $20 an hour PLUS PLUS PLUS a "complimentary CD with images of your brain." And if an ad promises you "an income stream of $6,000 a month, and *you only have to pay $27 once*," please say hi to all my good buds in Nigeria (and ask when they will be sending the other half of the formula for spinning bellybutton lint into gold).

But I'm starting to sound like one of those ads for a prescription drug where the side effects are worse than the disease. This is my cue to spend a little more workplace time polishing my "Personal Mission Statement" and practicing "Positive Career Management Visualization." That way I will be ready when the right job turns up on Craigslist. Just now, for instance, I spotted a "Casting call for zombie/horror movie" in New Jersey, which would have been perfect, except that I am apparently too old to play someone who has recently been dead. Still, I remain "confident and self-assured," because I know that the opportunity of a lifetime is just another 20,000 or 30,000 clicks away.

RICHARD CONNIFF's *newest book is* Swimming With Piranhas at Feeding Time: My Life Doing Dumb Stuff With Animals.

ERIC PALMA